NATIONAL NEONATOLOGY FORUM

NATIONAL WORKSHOP
ON
TRADITIONAL PRACTICES OF NEONATAL CARE IN INDIA

CONVENOR : S. N. VANI

NNF 1990
EXECUTIVE COMMITTEE MEMBERS

PRESIDENT	:	DR. MEHARBAN SINGH
PRESIDENT ELECT	:	DR. D. K. GUHA
SECRETARY	:	DR. SUDARSHAN KUMARI
JT. SECRETARY CUM TREASURER	:	DR. V. K. PAUL
EXECUTIVE MEMBERS	:	DR. S. GOPAUL
		DR. SHIKHAR JAIN
		DR. DILIP MUKHERJEE
		DR. SHASHI N. VANI
		[illegible] (EX. OFFICIO)
		[illegible] (EX. OFFICIO)

REPORT AND RECOMMENDATIONS OF THE NATIONAL WORKSHOP ON TRADITIONAL PRACTICES OF NEONATAL CARE IN INDIA

CONDUCTED BY
DEPARTMENT OF PAEDIATRICS
B.J.. MEDICAL COLLEGE
AHMEDABAD

UNDER THE AUSPICES OF
NATIONAL NEONATOLOGY FORUM
AND
MINISTRY OF HEALTH AND FAMILY WELFARE,
GOVERNMENT OF INDIA

AND

SUPPORTED BY,
UNICEF, INDIA.

VENUE: CAMA HALL,
CIVIL HOSPITAL CAMPUS,
AHMEDABAD.

DATE AND TIME:

19th JAN. 1991 — 9.A. M. TO 7.30 P. M.
20th JAN, 1991 — 9 A.M. TO 5.30 P. M.

CONVENOR: DR. (MRS) S. N. VANI
PROFESSOR & HEAD OF THE DEPT. OF PAEDIATRICS,
B.J. MEDICAL COLLEGE & CIVIL HOSPITAL,
AHMEDABAD - 380 016.

Publisher : Dr. (Mrs.) S. N. Vani,
Professor and head of the dept. of paediatrics,
B. J. Medical College and Civil Hospital, Ahmedabad 280 0016

Printer

Jitendra T. Desai

Navjivan Mudranalaya

P. O. Navjivan, Ahmedabad. 13

Chief co-sponsorer :
LOK SWASTHYA PARAMPARA SAMVARDHAN SAMITHY,

Co-sponsorers :
INDIAN ASSOCIATION OF ADVANCEMENT OF MEDICAL EDUCATION
(GUJARAT CHAPTER)

INDIAN ACADEMY OF PAEDIATRICS
GUJARAT STATE BRANCH

INDIAN ACADEMY OF PAEDIATRICS
AHMEDABAD BRANCH

ORGANISING COMMITTEE

CONVENOR	:	**DR. SHASHI N. VANI**
TREASURER	:	**DR. JAYENDRA R. GOHIL**
PROGRAMME MANAGEMENT:		**DR. M. J. MEHTA** **DR. A. A. SHAH**
ACCOMMODATION & TRANSPORT	:	**DR. A. G. MOMIN**
REGISTRATION	:	**DR. P. R. SHAH** **DR. B. M. SHAH**
SCIENTIFIC COMMITTEE		**DR. MAHESH SHARMA** **DR. MADHULIKA KABRA** **DR. SUSHEEL KABRA**
SOUVENIR		**DR. NEELAM RAVAL**
CLERICAL ASSISTANCE	:	**SRI. YOGESH VYAS**
ASSISTANCE	:	**SMT. BEENA PATEL**
HELPERS	:	**MEERABEN** **RAMANLAL** **HIRALAL** **KAMALABEN**

CONTENTS

The opinions expressed in the background papers are not necessarily tantamount to the recommendations of the Workshop. They reflect the personal views of the authors.

Section – I

With great pleasure and pride, I submit this report of a very successful national workshop on traditional practices related to neonatal care in India, conducted by us at Ahmedabad under the auspices of National Neonatology Forum.

It has been a very challenging and difficult subject to handle and needed a lot of preparations and review of literature and available information. Earlier, NIPCCD had conducted a National Seminar on Traditional (including Tribal) Practices in mother and child care on 27-28 Feb. 1989. But it did not contain details pertaining to neonatal care. So it was decided to discuss further details during this workshop.

WORKSHOP BACKGROUND :

The Indian society is still tradition bound to a large extent and almost all the families have their own traditions of neonatal care. Even educated families and economically sound urban elite are also not exempted from the influence of traditional baby care practices. With modernization and gradually increasing availability of neonatal care facilities, some of the age old practices have started fading, probably giving rise to some new ones.

Majority of our newborns are home delivered and do not have an easy access to modern medical services and specialists, advise. This problem is much more acute in remote rural areas, difficult tribal areas and crowded urban slums. The babies born here are mostly reared through traditional practices only which have been handed down from generation to generation in families.

We do have some excellent child care practices like almost universal breast feeding, warming practices like cradling, use of traditional toys and various others. But at the same, we notice that many traditional practices have undergone a lot of distortions and twists and have become totally unacceptable in the way they are being practiced currently.

Under the pretext of tradition, use of unstandardised, unwarranted commercial preparations like Gripe waters and Ghuttis are being promoted and sold across the counter in almost all drug stores.

Use of home remedies is also a very vital issue. Being cheap and easily available, simple home remedies are welcome for the minor common complaints of the newborn. But, there is a very thin line between their proper use and quackery.

There is a big list of traditional practices which are either universal or region specific.

It is a keen desire, that the blind imitation of Western culture be avoided and we should not loose some of our rich traditions of neonatal care practices which are more relevant to our needs. At the same time, we are equally anxious that we should not be the victims of superstitions and wrong unscientific beliefs and perpetuate harmful practices.

Thus, we find, traditional practices have a great influence on the currently prevailing morbidity and mortality pattern of our newborns and we cannot afford to ignore a detailed study and research in this vital subject.

With this background, the National Neonatology forum had rightly chosen this subject for a National level Workshop, probably a first of its kind.

THE OBJECTIVES OF THE WORKSHOP:

1. To collect the recent data about the prevalent practices and the related beliefs about neonatal care from different parts of the country and from different strata of society.

2. To bring about a dialogue between experienced persons practicing different systems of medicine and to arrive at common recommenda-

tions regarding :

a) Beneficial practices worth promoting
b) Harmful practices worth discontinuing
c) Innocuous practices that may be allowed to continue
d) Practices about which further research is needed.

3. To bring about recommendations regarding messages related to traditional practices of neonatal care that should be incorporated in the training of community health workers and traditional birth attendants.

4. To create an awareness amongst experts of all systems of medicine about the importance of this subject and continue studies in more detail in all parts of the country.

5. To study the utility or futility of the various commonly used home remedies and medications.

PREPARATORY PHASE OF THE WORKSHOP :

Review of available literature on the subject indicated paucity of recent information on the subject and need to collect more data from various states of India. So at the preparatory phase, a national level survey was planned on a carefully designed questionnaire. With proper guidelines, these questionnaires were sent to academicians in medical college institutions (belonging to dept. of pediatrics, preventive and social medicine and obstetrics) nursing colleges, voluntary health care agencies etc. covering almost all the states of country. Due to the prevalent disturbances and communications problems in the country, a few states received the questinnaires as late as two months and hence could not send their data on time. Almost 20 agencies covering 12 states had responded. The collected data was analysed and presented during the workshop. We continued to receive good amount of data even after the workshop was over. It has been analysed and data presented in this document. A valuable assistance was received for this exercise from UNICEF - INDIA.

In the preparatory phase, all the available documents on the subject were collected and an overall review was prepared regarding the traditional practices prevalent in various parts of the country and that report was also presented during the workshop, the copy of which has been included in this report.

These two exercises formed a very important basis for generating discussions and drawing up useful and relevant recommendations during the workshop.

An attempt is still continuing to collect the information from the remaining states also.

WORKSHOP INAUGURATION :

Dr. M. J. Mehta, Hon. Professor and the senior paediatrician of the dept, welcomed the dignitaries and the partcipants. Dr. (Mrs) S. N. Vani, professor and head of the dept. of paediatrics and convenor of the workshop narrated the genesis of the workshop in brief and objectives of the workshop and proposed programme outline.

Inauguration was by srimati Elaben Bhatt, a leading social worker, winner of the prestigious Magsaysay award, official Indian representative for the UN Convention on Rights of Children, ex-member of the planning commission and the secretary of Self Employed Womens Association working for the self reliance and economic upliftment of women of weaker sections of the society and as a coroliary, carrying out various mother and child health care and family welfare activities.

She vividly described the genesis of their maternal protection programme and dai training

programme and pleaded for improving the training programme and facilities of TBAs in our country. In this context, she emphasised the importance of various traditional practices and need to preserve good old traditions related to perinatal care and weed out the harmful ones and integrating the good ones in the primary MCH care system of our country was also stressed. She applauded the efforts of NNF, GOI and UNICEF for picking up this challenging subject for workshop.

Our guest of honour was Dr. P. M. Shah., officer on MCH at WHO, Geneva. He encouraged us very much by delivering the first keynote address and being with us till the end of the group discussions in the late evening and participating actively in the discussions and giving his valuable suggestions. In his address, he presented a global overview on MCH care and particularly the status of women and children and developing countries like India and listed out various priorities and strategies adopted by WHO for improving the standard of care offered to women and children. In this context, he also appreciated the selection of subject and programme planning and the laudable effort of bringing together people from different systems of medicine including those from modern medicine as well as traditional medicine (Ayurved) as well as from teaching institutions, voluntary agencies, administrators, workers, trainers etc. for bringing about pragmatic recommendations.

Dr. T. B. Patel, DIrector of M. P. Shah Cancer Research Institue and Ex- Director of Medical & Health Services, Govt. of Gujarat and President of Gujarat chapter of Indian Association of Advancement of medical education, presided over the inaugural function. In his presidential address, he outlined the various efforts and achievements of Dept. of Paediatrics of CHA in promoting MCH services, training and research and appreciated the latest effort of this workshop.

The inauguration session was attended by many dignitaries including Dr. P. C. Shah, the Addl. Director of Health and Medical Services, Govt of Gujarat, Dr. C. A. Desai, the Dean of B. J. Medical College Dr. Kamal Nayak, Principal of Regional Family Welfare Training centre and Joint Director of health, Dr. M. K. Bellany, Joint Director of health (MCH), Director of Ayurved, etc.

THE PARTICIPANTS

(Detailed List Enclosed) : Included eminent and experienced persons from various areas i.e. paediatricians, neonatologists, obstetricians, professors of preventive and social medicine, nursing tutors, public health nurses, social workers, housewives, trainees of paramedicos and I. C. D. S. functionaries, faculty members from Ayurved and Homeopathy, representatives from voluntary health care organisations :

a) Lok Swasthay Parampara Samwardhan Samithy (All India)
b) Sewa- Rural Zhagadia
c) Gujarat Voluntary Health Association (G. V. H. A.) , Baroda.
d). Lalbhai Rural Development Fund, Gujarat
e) Narotham Lalbhai Rural Development Fund,
f) Ahmedabad Women's Action Group, Ahmedabad
g) Middle level worker's training centre of Crime Prevention Trust, Ahmedabad
h) Sevamandal - Meghraj (Tribal Area) Gujarat
i) UNFPA - Simla, Himachal Pradesh
j) CHETNA - Ahmedabad

Director of Health - Govt of Gujarat
Director of Ayurved - Govt. of Gujarat
Director of Drug Control and Administration - Govt of Gujarat
Director of Tribal Research Centre of Gujarat Vidhya Peeth

PROGRAMME

19. 1. 1991 Saturday :

9.00 AM : Registration

9.30 AM : Inauguration - Smt. Elaben Bhatt (SEWA -Ahmedabad)
Guest of Honour
- Dr. P. M. Shah (Medical Officer MCH WHO - Geneva)

10.30 AM : Coffee Break

11.00 AM : Introduction of Participants.and Group assignments
Preliminary session
Chair person - Dr. A. B. Desai
Cochair person - Dr. Kasture

11.15 AM : Importance of study of traditional practices of neonatal care in India
- Dr. V. K. Paul

11.35 AM : Traditional medicine and Neonatal care
- Sri A. V. Balasubramaniam

11.55 AM : Principles of neonatal care in Ayurved
- Vd. J. Rawal

12.05 AM : Principles of neonatal care in Homeopathy
- Dr. Suresh Patel

12.15 Noon : Discussion

12.25 PM : National survey on Traditional Practices related to Neonatal Care - Presentation of Data
- Dr. S. N. Vani
- Dr. M. Sharma
- Dr. S. Kabra

1.00 PM : Lunch

2.00 PM : Symposium on Traditional Practices related to Neonatal Care
Chair Person : Dr. S. N. Vani
Cochairperson : Sri. Balasubramaniam

- Himachal Pradesh and Haryana - Dr.Sharad Aiyangar
- Gujarat (Rural) - Dr. Shobha Shah - Zagadia
  " - Shri H. Jani - Khedbrahama
  " - Chetna, Ahmedabad.
  (Tribal Areas) - Ms. Harshida Dave
- N. Delhi - Dr. A. Saili
- Manipur - Dr. Ibethombi Devi
- Lucknow and U.P. - Dr. Prabha Tandon
- Presentations by two TBA s from Zagadia (Personal Experiences)
- Demonstrations by TBAs (Before and after training)
- Overview of traditional practices as documented in literature
-Dr. Madhulika Kabra

3.30 PM : Discussions

4.00 PM : Group Discussions.

Group Leaders :

to
7.30 PM
- Dr. Sundarlal
- Dr. V. K. Paul
- Dr. Sharad Aiyengar

Rapporters :
- Dr. M. Sharma
- Dr. Madhulika Kabra
- Dr. Susheel Kabra

20.1. 1991 SUNDAY :

Chair person : Dr. Sudarshan Kumari

9.30 PM. : Cultural practices Science vs. religion in newborncare
- Dr. (Mrs.) A. B. Desai

9.50 AM : Traditional practices and early child stumulation
- Dr. Smt. Kanta Nath

10.10 AM : Traditional practices - a psychiatrist's perception
-Dr. R. Bilwani

10.20 AM : Discussions

10.30 AM : Coffee Break

11.00 AM : Symposium on Traditional home remedies and Medications

Chair person : Dr. Sundarlal

Cochairperson : Sri A. V. Balasubramaniam

Allopathic perspective	- Dr. Arun Phatak
Ayurvedic perspective	- Vd. Ila Deshpande
Homeopathic perspective	- Dr. R. K. Desai
	- Dr. Bhaskar Bhat
Policies of approval of home remedies	- Dr. M. A. Patel
Housewife's perspective	- Ms. Saroj Verma
Tribal practices.	- Dr. Solanki

Performance evaluation of family welfare programms at PHCs of seven districts from U. P. - Dr. Prabha Tandon

12.00 Noon : Discussions

1.00 PM : Lunch

2.00 PM : Group Presentation and Discussions

3.30 PM : Coffee Break

4.00 PM : Recommendations

5.30 PM : Concluding Session

HIGHLIGHTS OF THE PROGRAMME :

a) Importance of study of traditional practices of neonatal care in India.

b) Neonatal care principles in different systems of Medicine - this enabled the participants to trace the origin of some of the traditional practices.

c) Review of the available literature - this was quite comprehensive and enabled the participants to have an overview of Prevailing Practices in our country.
Results of the National Survey conducted by us were presented in two sections.
The data was very informative and valuable.

d) Symposium on traditional practices of neonatal care from various parts of the country provided a good forum for the participants to present their regional data and share experiences and compare with others from different parts of the country.
c) and d) formed a good basis for further discussions and drawing up recommendations.

e) Topics on traditional practices and science vs. religion and early childhood stumulation and psychiatrist's view on traditional practices provided a different area for pondering on the subject.

f) Symposium on home remedies was obviously a very interesting one. Heated discussions generated between the Director of Drug Control and Administration on policies of approval of Ayurvedic preparations and methods of standardisation. Very important topics like Janam Ghutti and Gripe waters were discussed and a lot of information was obtained and useful suggestions were made

g) The best part of the programme was formation of groups and group discussions. 3 groups were formed with a leader and rapporteur each.

Group A looked into antenatal and intranatal practices related to neonatal care under the leadership of Dr.Sundarlal

Group B looked into feeding and warming practices of the newborn under the leadership of Dr. V. K. Paul.

Group C looked into all the rest of the practices of neonatal care under the leadership of Dr. Sharad Aiyengar.

This was a very useful activity. The groups were given a working list of traditional practices related to neonatal care as gathered from survey, literature and our personal experiences and a few dummy formats describing the extent of practice, how it is being practiced in the community, what are the allopathic and ayurvedic perspectives, what are the objections, if any, and then what are the final recommendations. Formats on a few common traditional practices e.g. Janam Ghutti, Kajal, Prelacteal feed etc. as prepared according to the guidelines given above were circulated to groups and were requested to formulate their recommendations on similar pattern for other practices in their given areas.

All the participants did this exercise very enthusiastically and it cannot be believed unless actually seen, how they continued to discuss till late evening. Even strong sceptics about this topic, found this exercise very useful and interesting.

At the end of second day, general recommendations were outlined and guidelines given for preparation of a few specific recommendations.

OTHER ACTIVITIES :

A souvenir named 'Nav Jyot' or 'New Light' was brought out on the occasion. It contains 3 useful articles briefly outlining the principles of neonatal care in modern medicine, traditional medicine (Ayurved) and Homeopathy. These

write ups have proved very useful and imformative to persons from other systems.

An exhibition of posters, audiovisual slides, charts etc. related to traditional practices of MCH care was put by the Dept. and Lok Swasthya Parampara Samvardhan Samithy. Many educational pamphlets from WHO (brought by Dr. P. M. Shah, personally) GOI, Govt. of Gujarat and other voluntary agencies were displayed and distributed to the participants.

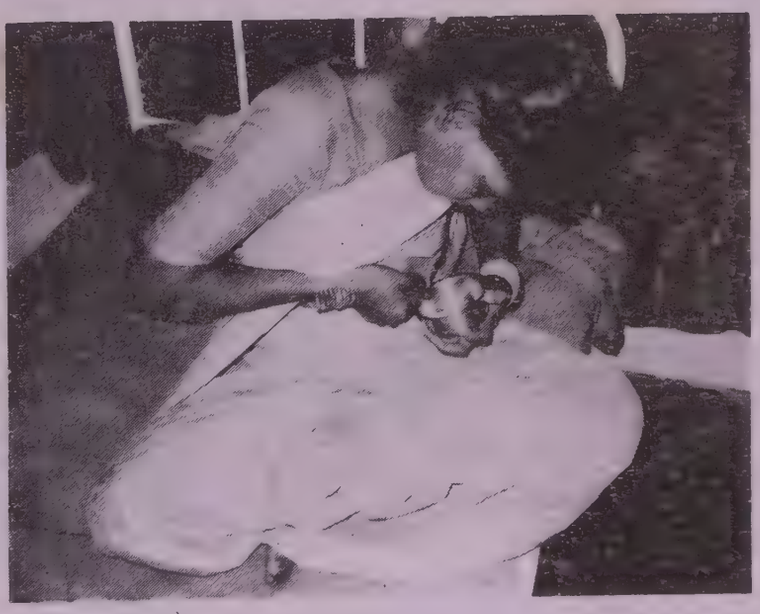
Video shows on traditional neonatal care practices by Vd. Paranjpe and others were arranged during the sesssion. They were really very unique and enjoyable.

Mass media coverage on local TV, newspapers and AIR was very encouraging especially from the point of view of publicity and awareness creation for the topic by community in general.

AIR recorded a special programme by Dr. P. M. Shah and Dr. S. N. Vani on traditional neonatal care practices and relayed it more than once.

A FEW COMMON TRADITIONAL NEONATAL CARE PRACTICES OF GUJARAT (PICTURES TAKEN ON LOCATION)

Getting ready for galthuthi (Prelacteal feeds) for a newly born.



Primi expressing out colostrum.

Throwing away colostrum as advised by the elders.

Rooming in of mother and baby in a dark corner with dirty clothes.

Sixth day ceremony (छठी) Goddess supposed to write fate–some mothers put stitched clothes to baby only after this ceremony.

Isolation of mother-baby dyad for forty days in a warm environment.

Oil massage to baby before bath.

Oil massage continues in a warm room.

Instillation of oil drops in nose.

Instillation of oil drops in ears.

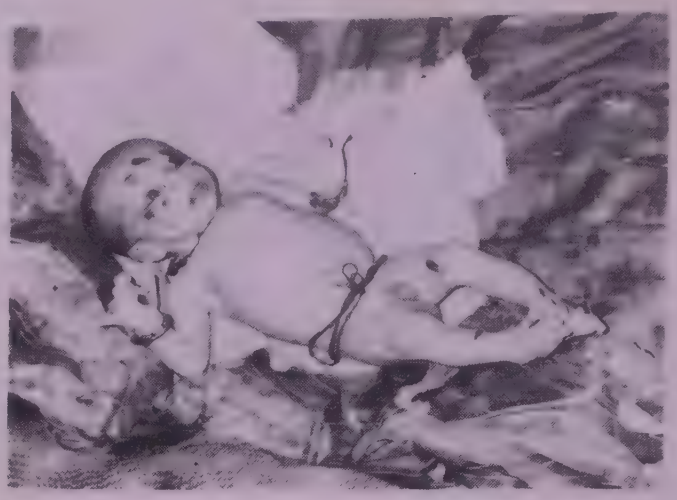
Oil application on anterior fontanelle.

Traditional baby bath.

Blowing through ears after bath.

Use of fire to warm up after bath.

Warming up baby's clothes on heated 'TAWA' to maintain 'Warm Chain'.

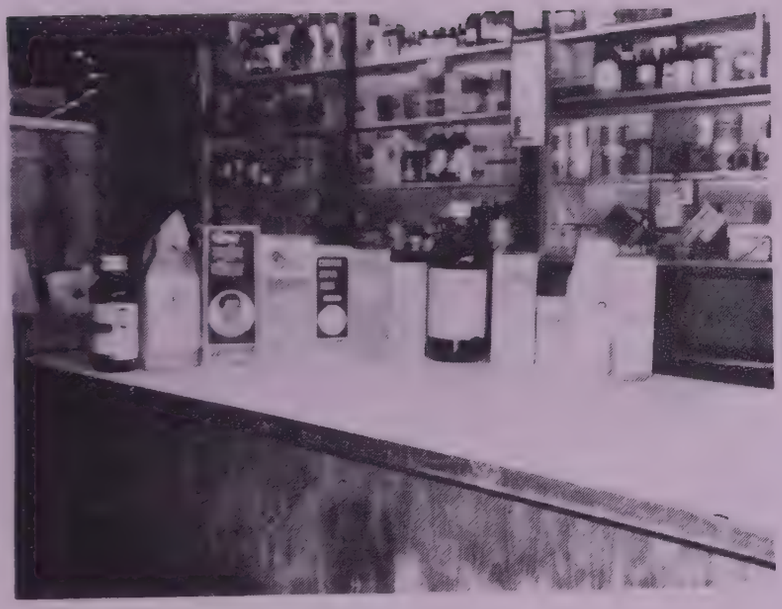


Typical baby smeared with Kajal, Waistbands, amulet etc. to avoid evil eye (Nazar-Drishti).

Preparing ghutti with herba ingredients prepared on a flat stone.

Offering ghutti to baby

Regular use of gripe water.

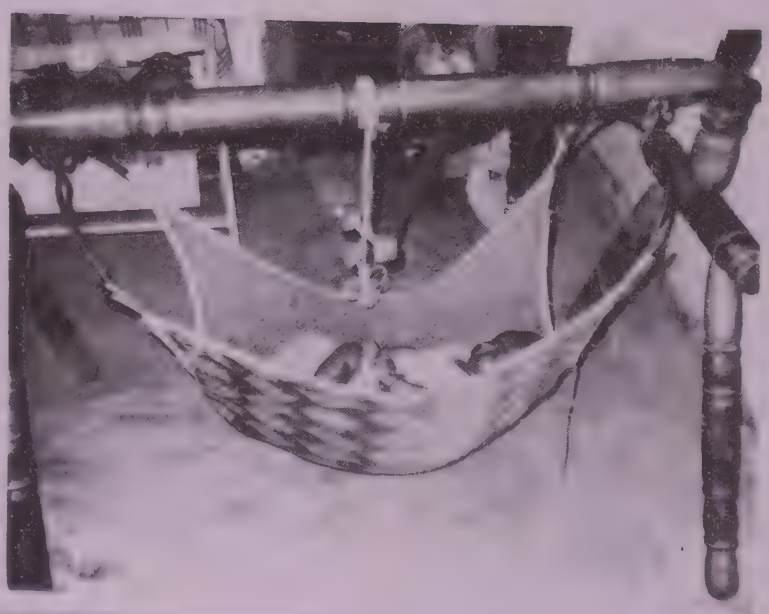


Gripe water and similar products sold across the counter.

Costly baby products like baby powders.

Piercing of ears and nose by professional quack.

Baby with traditional clothes in a cradle at home.



Traditional toys tied to a traditional cradle.

Section – II

GENERAL RECOMMENDATIONS

I. General recommendations outline the framework in which traditional practices in neonatal care(TPNC) are to be looked upon and implemented.

II. Most of the TPNC appear to be apparently based on common sense, logic and scientific justification. But they have been given or undergone a lot of change and twist over decades, and some of them have become unacceptable in the present times.

III. Therefore, there is a strong need to evaluate various TPNC and the way they are currently being practised in different parts of our culturally heterogeneous country (The National Survey of TPNC conducted by us constitutes only a small sample), before any system of medicine seeks to justify or condemn them.

IV. Many TPNC have taken origin from ISM (Indian System of Medicine). There appears to be a lack of perspective as to how the current ISM professionals approach these TPNC. It is necessary therefore that ISM must evaluate the how and why of these practices, and come up with their recommendations on these TPNC. The ISM will have to group these TPNC into harmful, potentially harmful, innocuous, beneficial and thereafter incorporate them in their undergraduate and other training programs. Rationalisation of drug therapy on sound scientific principles and not merely on empiricism will keep in check TPNC that have stemmed from ISM drugs and home remedies (e.g. janam ghutti). Apart from ISM, other traditional systems of medicine (Siddha, Unani, Homeopathy etc.) should be made aware of correct and acceptable practices in neonatal care, so that these systems of medicine practice rational curative medicine.

V. A balanced viewpoint of professionals from modern medicine (MM) as regards TPNC and scientific evaluation of these practices with an open mind is essential.

VI. TPNC influence, and may also get influenced themselves, by medicinal preparations sold over the counter. This has led to a number of ISM, allopathic and mixed (ISM + allopathic) formulations being promoted through advertisements and free counter sale under the pretext of promoting traditional systems of medicine. All medicinal preparations intended for use on newborns (and young infants) must have their contents, dosages, indications and contraindications displayed prominently.

VII. To harness maximum benefit from TPNC, all systems of medicine should advocate simple, scientifically safe and traditionally acceptable alternatives to currently exploited and promoted costly baby products (e.g. baby oil, baby soaps) by way of coercive commercial media campaigns. (This fight against commercial exploitation in the name of 'baby care' should be taken up in a similar way as the one against milk powders and breast milk substitutes).

VIII. Some select TPNC that are widely prevalent in the country should be immediately taken up for scrutiny and specific recommendations: these should be evaluated for their potential to reduce neonatal morbidity and mortality. Detailed evaluation of these TPNC with the help of current scientific approach of enquiry should bring out simple and useful messages that can be taken up by media (Refer recommendations for media) and in various training programs (Refer recommendations for trainers and trainees) for medics and paramedics.

IX. Since so much temporal and geographic variability exists for various TPNC, their evaluation must be an ongoing and region specific program. The concurrent evaluation of TPNC would permit a check and balance system on newer (and future) twists and turnabouts due to the advice of any system of medicine. Regional TPNC identified as scientifically rational and beneficial should be propagated from one region of the country to another (recommendation for media). Evaluation of TPNC in upper strata of society would also be important since a few TPNC percolate down to the lower and more populous classes by way of imitation.

X. It cannot be overemphasized that considerable integrated research at national and regional level is currently required to demarcate TPNC (in their existent forms) into harmful, potentially harmful, innocuous and beneficial practices.

SPECIFIC RECOMMENDATIONS

These are framed for specific TPNC identified to be widely prevalent in the country through 'National survey on TPNC' presentations and discussions during the workshop on TPNC and 'Review of Literature'. The ISM background has been incorporated for reference wherever applicable. Neonatal infections and birth asphyxia - trauma complex are the leading causes of neonatal morbidity and mortality in India at present. TPNC pertaining to these areas should receive urgent consideration and given priority.

Specific recommendations are being made for :

Cord care practices.
Resuscitation practices.
Prelacteal feeds.
Colostrum and breast feeding practices.
Lactagogues.
Wet nursing.
Janam ghutti.
Gripe water.
Nose and ear piercing.
Kajal application.
Surma application.
Baby bath at birth.
Baby massage.

CORD CARE PRACTICES

EXTENT AND ORIGIN

Indigenous cord care practices are prevalent throughout the country. Such practices involve cord cutting, tying, dressing and preservation of shed cord. There is widespread variability in the instrument used for cutting the cord (knife, sickle, bamboo spike, and so on) and also regarding materials applied on the cut end (turmeric, kum kum, ghee.oil, cow dung, ash, and so on). The cord tie varies from thread, bamboo shred, cloth strip to sacred threads used for tying hair. The shed off cord stump is preserved for supposedly auspicious purposes (eg. pregnant women eating it for a male child) and medicinal use(eg. crushed cord used for eye discharge in the newborn)

Some cord dressing material (e.g. turmeric) originates from ISM. Questionable cord binders are traditional in many parts of the country. The heterogeneity of cord care practices reflects their varied origin.

SUPPORT

ISM :
Cord cut :It is done by preheated, sickle or knife shaped, instrument purified in fire after delivery of placenta.
Cord tying: One tie four fingers away from the stump and one more tie about 6" away and cut it in between the two ties (with soft, new, silk threads.)
Cord application : Turmeric, ghee, special oils.
Cord binders are not specially mentioned in ISM literature, but the cut end of the cord is to be treated as a wound and tied around the neck of the child with the ends of the thread used for tying the cord.

MM : There is no support from modern medicine for the practices of unsterile cord cutting, different applications on the cut stump and use of cord binders.

OBJECTIONS :

Any unsterile procedure/material or any procedure carrying the risk of neonatal infection (clostridial or non-clostridial) cannot be recommended for cord care. Many such practices constitute a potential risk for development of neonatal tetanus, sepsis neonatorum and omphalitis.

Binders should not be applied over the cord stump. These binders increase local colonization, get soiled and delay diagnosis due to delayed identification of signs of inflammation of umbilical sepsis (e.g. erythema). Dressing creates anaerobic conditions, thus promoting the growth of Clostridia tetani. Even though some of TPNC on cord care are based on scientific basis (e.g. turmeric for its antiseptic and anti-inflammatory action) there is no place for them today as better antiseptics are widely available at minimal cost. However there are logistic problems for their distribution and maintenance of supplies in the community.

RECOMMENDATIONS

CUTTING Cord cutting and tying must be a sterile procedure.
The umbilical stump should be left open.

DRESSING : GV paint, triple dye, or betadine can be used for local application. All other substances should not be used till results of double blind control trials are available and accepted by NNF, India. Proper hygiene and asepsis must always be ensured.

BINDING Scientific evaluation of original practices of cord care, (as advocated by ISM) should be done. Cord binders are not to be used.

RESUSCITATION PRACTICES

EXTENT AND ORIGIN

All birth care practices recognize the importance of resuscitation at birth. However, the procedure of resuscitation is variable, ranging from excessive physical stimulation, blowing air in baby's mouth, ringing a bell near the baby, crushing the placenta and so on. Some resuscitation practices may have originated from ISM way back but cannot be recognized as an 'ISM practice' in the fashion they are being practiced today.

SUPPORT

MM recommends gentle flicking of soles(twice only) after clearing the airways as this is enough to initiate spontaneous breathing in a baby with primary apnea. Further physical/environmental stimulation only wastes precious time during resuscitation, and may lead to trauma. Prior preparation for resuscitation is a must in all deliveries. In desperate situation, skillful mouth to mouth breathing is useful to provide positive pressure ventilation through the use of mouth mask.Bag and mask ventilation is more effective. Use of bag and mask should be popularised at primary level.

OBJECTIONS

ISM also recommends that proper preparation for resuscitation should be made in all deliveries.

Resuscitation practices in the way they are being practiced are ineffective and contribute to asphyxia neonatorum and birth trauma.
TPNC related to resuscitation emphasize clearing of airways in vigorous and unhygienic ways. Moreover these TPNC's have elaborate procedures which waste precious time during resuscitation, more so on some form of stimulation.

RECOMMENDATIONS

Level I caretakers must be trained in the art of neonatal resuscitation with a correct and effective procedure. (clearing of airway, physical stimulation mouth to mouth breathing/ positive pressure ventilation with mouth to mask or bag and mask). Clearing of mouth first (and nose thereafter) is to be done in a gentle and aseptic way. A clean cloth should be interposed between the mouth of the baby and the birth attendant before starting mouth to mouth breathing.

PRELACTEAL FEEDS

EXTENT AND ORIGIN

Given by an elderly person(male/female) so that his/her characters are imbibed by the newborn.
Widely prevalent, usually given in form of honey, ghee, butter, jaggery, sugar water, milk or a combination of any of these.
Usually given in small amounts along with simultaneous breast feeding while in some regions breast feeding is delayed.
Given with finger, cotton wick, spoon, bottle, special devices like 'paladey', usually without any concern for hygiene.

SUPPORT

Breast milk output is presumed to be poor during the first few days. This is one of the reasons for giving prelacteal feeds.
Colostrum is considered dirty, harmful and/or 'heavy' for the baby. In certain communities, breast feeding is started after a fixed time postnatally, and in the meanwhile prelacteal feeds are given.
Has support from ISM, reason being that prelacteal feeds are supposed to increase strength, vitality and longevity of the recipient.

OBJECTIONS

Prelacteal feeds delay initiation of breast feeding.
Poor hygiene can cause infection in the neonate.
There is no quality control over the ingredients.
May perpetuate the practice of discarding colostrum.
May prevent hypoglycemia in high risk newborns (IUGR, IDM) but there is no direct support from MM.

RECOMMENDATIONS

Routine prelacteal feeds are not needed at all.
To ensure early breast feeding the healthy newborn should be put to breast within half an hour of birth or as early as possible. When breast milk is unobtainable honey may be given if proper hygiene is ensured. However this practice should not lead to delay in breast feeding and discarding of colostrum. If there is no way to check this, the practice ought to be restricted as far as possible.
There is a need to evaluate its utility for prevention of hypoglycemia in IUGR and IDM.
Scientific evaluation is needed for its role of prelacteal feeds in prevention of early onset hemorrhagic disease of newborn. Keeping the child nil orally for a long time after birth can delay colonization of gut, leading to poor synthesis of Vit K.

COLOSTRUM AND BREAST FEEDING PRACTICES

EXTENT AND ORIGIN

Colostrum is traditionally discarded in many communities. Delayed breast feeding (more than 2 - 5 days) is prevalent in many parts of the country.
Colostrum is considered dirty, harmful and 'heavy' for the baby. There is poor lactation in many mothers during immediate pospartum period. In certain regions of the country it is a ritual to delay breast feeding for a certain period of time after birth. Another common belief is that the mother is not able to feed and the newborn is not able to suck for a few hours/days after birth. ISM recommends that the first few drops of colostrum should be discarded to have a 'cleansing' effect on the breast before feeding starts. It is possible that this TPNC stems from ISM.

SUPPORT

From MM : None.
From ISM: Only first few drops of colostrum are to be discarded.

OBJECTIONS

The newborn is deprived of scientifically proven nutritional and immunologic benefits of colostrum.
Delayed breast feeding may diminish lactation or cause engorgement of the breast, leading to problems in breast feeding later. Delayed breast feeding ,may promote unnecessary supplementary feeding with attendant risks of contamination and diarrhea.

RECOMMENDATIONS

Colostrum must be universally given to all newborn babies. It should not be discarded.
In case the family elders insist, only the first few drops may be allowed to be discarded, but this must be promptly followed by enthusiastic initiation of breast feeding. The initial breast milk output is enough for the baby. Early sucking promotes breast milk production and mother - infant bonding.

Breast feeding should be started as soon as possible, given at a frequency of every 2-3 hours(more frequently for small for dates) till demand feeding is well established. For normal deliveries, attempts should be made to commence breast feeding within half an hour of birth or as soon as the mother is fit enough to feed.

LACTAGOGUES, POST PARTUM DIET RESTRICTION

EXTENT AND ORIGIN

Lactagogues are traditionally given to nursing mothers nearly everywhere in different preparations. Usually, ghee, milk, ajwain, saunf, dry fruit ladoos and other indigenous preparations (harida, peeplamul, suva water, saunth, jeera water, and so on) are given. These practices have been derived from ISM. Post partum restriction of normal diet is widely prevalent, the period of restriction varying from 2 days to 2 months.

SUPPORT

MM: Since lactagogues basically are an attempt to promote breast feeding, they are to be encouraged. The mother has a good chance of getting emotional and nutritional support due to these practices.
ISM: Supports indigenous and herbal prepara-

tions for use as lactagogues irrespective of the fact whether the mother has adequate or inadequate breast milk output.

OBJECTIONS

The mother should not be denied normal and regular balanced diet after delivery. Lactagogues should not become substitutes of a regular diet; if used, they should remain supplements only. Lactagogues can become a monitory burden on a family and curtail the finances allocated for mother and child care in a family. In such cases, lactagogues are to be discouraged and only regular, balanced family meal are advocated.

RECOMMENDATIONS

This practice can be continued provided these preparations do not replace normal diet. Dietary restrictions after delivery should be strongly discouraged.
Early and frequent sucking on the breast is the best stimulus for breast milk output. Lactagogues are not a must, and should not restrict the normal diet(socially or economically).

All systems of medicine should encourage the post partum mother to take a balanced diet as soon as possible after delivery. Lactagogues should only be considered as adjuncts.

Effects of traditional lactagogues on lactation promotion ought to be scientifically evaluated.

Lactagogues give emotional and psychologic support to the nursing mother and indicate preferential treatment of the mother in the family.

WET NURSING

EXTENT AND ORIGIN

This TPNC is ritualistic in tribal areas of Central India and North East India. The practice is perhaps based on the belief that the mother needs rest after labour, but as a tradition it is carried on for 2-4 days after delivery.

SUPPORT

MM: Wet nursing is promoted in special situations only where the mother is seriously ill or has died.
ISM: Same as MM.

OBJECTIONS

If wet nursing causes delay in establishment of breast feeding with the biologic mother, it would affect a physiologic routine, and lead to subsequent problems in breast feeding.
The child of the wet nurse should not be deprived of breast milk due to wet nursing.
In today's changing patterns of life, problems of getting a good wet nurse are to be recognized, moreover this mode of feeding may not always be acceptable.

RECOMMENDATIONS

Wet nursing is recommended only in situations in which the biologic mother is seriously ill or has died. There is no harm done when it is warranted. It is definitely superior to top feeding.
In normal situations, all efforts should be made to promote breast feeding by the biologic mother as early as possible.

JANAM GHUTTI

EXTENT AND ORIGIN

It is a widely prevalent practice throughout the country. It can be home made or commercial. It is given either as pre-lacteal feed or started later after a variable period. The amount administered varies from a few drops to a few spoons.Common ingredients are turmeric, ghee, saunf, harade, ajwain etc. But many a times these are unknown. A few contain opium derivatives also.It is traditionally used as a broad spectrum anti-ailment preparation for baby.
It is considered of special value in prevention and treatment of abdominal problems of the newborn. It is also supposed to contribute to the general well being and help in problems relating to teething.
Various ingredients have been taken up individually or in combinations from recommendations of ISM for treatment of ill defined symptoms which are mostly physiological in origin e.g. wind, colic, teething etc.

SUPPORT

MM : None.
ISM : Although some ingredients used in janam ghutti enjoy ISM support, but few formulations are specifically advocated in ISM scripts. The ingredients are advocated by ISM as carminatives, digestives, mental and physical growth promoters and for increasing the immunity of the baby.

OBJECTIONS

From MM, the ingredients have no documented role in prevention of neonatal ailments. The use of janam ghuttis becomes counter productive in many situations, places an economic burden on poor family and may divert attention from adequate early scientific intervention.
There is no uniform drug policy on the constituents, formulations, dosages, indications for these 'over the counter' preparations; therefore the composition is very variable. The therapeutic utility of these janam ghuttis and their side effects have not been studied. Their sale depends usually on blatant advertisement.
Some available preparations contain opiates and toxic amounts of belladonna alkaloids, as well as other potentially harmful substances. They are a potential source of neonatal infection, if prepared unhygienically.

RECOMMENDATIONS

Broad spectrum anti-ailment formulations, promoted by way of blatant advertisement under the pretext of traditional medicine should be shunned.Such formulations which are extremely variable in composition but still are advocated for the same symptoms without taking into consideration,the cause of symptoms cannot find any place in the scientific practice of neonatology. For example most janam ghuttis are recommended for treatment of both constipation and diarrhea in infants.Therefore, if at all janam ghuttis are prescribed, the ingredients, dosage and specific indications should be spelt out by ISM, and only formulations approved by the apex professional body of ISM should be sold on prescription. Advertisement of these preparations must be stopped. The widely publicised benefits of janam ghuttis ought to be carefully researched.The samples of janam ghuttis purchased over the counter should be randomly screened by regional drug controllers for potentially toxic substances (e.g. opiates).Instructions for strict hygienic preparation of ghuttis prepared at home should be given by ISM and their ingredients specified as regards quality and quantity. Parents are to use these ghuttis only under guidance of ISM professionals.

GRIPE WATER

EXTENT AND ORIGIN

The traditional use of gripe water is widely prevalent among urban and semi-urban populations and even in rural areas. It is considered to be a 'broad-spectrum' remedy for preventing and managing abdominal colic, teething problems, and for general well being of the newborn. This practice does not originate from ISM, Exact origin cannot be pointed out. It appears that gripe waters have gradually crept in by commercial advertisements, probably supported in the beginning by prescriptions from paramedics and quacks. Common ingredients are dil oil, aqua aniseed and alcohol in varying amounts.

SUPPORT

The use of gripe water is not supported by MM or ISM.

OBJECTIONS

Use of preparations like gripe waters for 'ailments' which are physiologic variations during development of a newborn is hazardous.

Such a practice diverts precious family resources and leads to a false sense of complacency in case disease actually sets in. The varying alcohol content of some brands of gripe water is objectionable simply because it is not indicated.

RECOMMENDATIONS

Like 'Janam Ghutti', over the counter sales, advertisement and usage of broad spectrum anti-ailment preparations should be stopped.

NOSE AND EAR PIERCING

EXTENT AND ORIGIN

Widely practiced all over the country in some form or the other. Female children are more often subjected to these practices.

Traditional in rural areas of Central and Western states, where male infants also get their ears pierced. For some male newborns, especially those considered 'precious' this practice is used to protect against the evil eye. Either nose, one ear, or both the ears are pierced, usually in the neonatal period.

In a large majority of newborns and young infants, this practice is followed because ornaments are to be worn, as a child and/or as an adult later in life. It is believed that piercing is easier (? less painful) in the very young.

SUPPORT

None from MM./ISM.

OBJECTIONS

It is a painful and traumatic procedure and scientifically unnecessary.Local and systemic infection may occur following these procedures especially in the newborn and the young infant.In unimmunized children, these procedures constitute a potential risk for tetanus.

RECOMMENDATIONS

When traditionally compulsory, nose and ear piercing should be deferred till the primary immunizations have been completed.It must be conducted as a sterile procedure. Sites like nasal septum should be avoided as a safeguard against excessive bleeding.

KAJAL APPLICATION

EXTENT AND ORIGIN

Kajal application in the neonatal period is a widely prevalent TPNC. It is believed to improve the eyesight and makes the eyes appear bigger and more beautiful. It is mentioned for its beneficial usage in Charak Samhita (ISM)

SUPPORT

MM : None.
ISM: Does not advocate use of kajal in neonatal period.

OBJECTIONS

This practice is associated with the risk of causing eye infection and allergy.

RECOMMENDATIONS

Kajal application should be stopped as far as possible as it is devoid of any therapeutic utility. When its use is traditionally mandatory, only home made kajal may be recommended provided the soot is applied under all hygienic precautions. Market preparations may be used only if they have been screened for potentially harmful (toxins/allergens) ingredients.

The benefits and possible harmful effects of kajal obtained from different source need to be researched.

SURMA APPLICATION

EXTENT AND ORIGIN

'Surma' is used mainly in North India. It may be applied in the eyes, at times even on the cut cord. The practice originates from ISM, Lead sulfide application to eyes comes down from Charak and Waagbhata.

SUPPORT

ISM recommends regular use of fine powder of mineral lead sulfide (Sauweeranjana) for preserving vision. There is no specific mention for its use in neonatal period.

OBJECTIONS

MM :Surma application is likely to cause higher blood levels and plumbism in children.

RECOMMENDATIONS

Surma use must be strongly discouraged. The potential hazard of surma application and the lead content of the material sold in the market must be prominently displayed on the containers.

BABY BATH (AT BIRTH)

EXTENT AND ORIGIN

It is a wide spread TPNC, more so in tribal populations. Tribal populations in Gujarat, Rajasthan and Madhya Pradesh invariably bathe the newborn with water to which special substances may or may not be added (e.g. neem, , ajwain). Bathing of babies soon after birth is practiced with considerable variation by non-tribal mothers as well. Soap may or may not be used, depending upon the interpretation of this TPNC by the family elder. The newborn covered with vernix is not acceptable in many communities (considered dirty, foul smelling). Hence many forms of cleaning are advocated, out of which an immediate bath is the most commonly practiced.

SUPPORT

MM : Nil.

ISM : Immediate bath is not recommended, Immediate cleaning is advocated with a soft, new clean cloth after the baby has received prelacteal feed and is stable.

OBJECTIONS

The vernix covering of the baby is harmless, may have a beneficial effect(reducing heat loss) and gets removed by itself.
Immediate bath carries a definite risk of hypothermia, which can assume serious proportions in cold weather and in small babies.

RECOMMENDATIONS

This practice should be strongly discouraged. Baby bath must be postponed till the newborn is 2-3 days old and for 1-2 months in case it is a preterm/IUGR or earlier if the newborn is stable as regarding temperature and feeding. It should be given with warm water and during mid noon in a warm room.
If traditional feelings for removing the vernix are very strong, some of it may be wiped off by a clean, washed and sundried cloth.

BABY MASSAGE

EXTENT AND ORIGIN

Baby massage in some form or the other is widely prevalent in many parts of the country. Substances used for massage also differ from place to place (edible or non-edible oils, fats, turmeric and indeginously prepared ointments). Massage of the anterior fontanelle is practiced in Maharashtra, Tamil Nadu and few other states.

The origin is traditional. It is customary to massage the baby daily, or on alternate days or weekly, so as to make babies healthier and stronger, to improve circulation, and to expose them to sunlight. In South India and Maharashtra oil is instilled in the nose and ears along with the massage. It is advised usually by elders, and frequently also done by them, but the mother may initiate it on her own. Many mothers have traditional knowledge of the technique.

SUPPORT

MM considers baby massage to be a good form of stimulation; it may enhance motor and social development of the baby and promotes maternal infant bonding.

It also facilitates frequent examination of the naked baby. The cutaneous film of oil/fat is protective against heat loss. Percutaneous absorption of lipids may have a possible nutritive role.

ISM supports baby massage. It tones up the muscles, better complexion and growth of the baby and promotes neuromuscular coordination etc.

OBJECTIONS

Undue exposure to cold may occur at times, but this objection may be theoretical only because baby massage is traditionally done in sunlight or in a warm area. The practice of instilling oil drops in the nose is well known to cause lipoid pneumonia.

RECOMMENDATIONS

Massage should be done in good sunlight, free of cold air droughts. The adverse effects of even mild exposure to cold in small babies (preterms, IUGR) must be emphasized. Putting oil drops in the nose is to be strongly discouraged. Handwashing, and strict hygiene must be ensured, as for any other procedure on the newborn. Keeping the above mentioned considerations and precautions in mind, baby massage is recommended and should be promoted. The substances used for massage are harmless. Potential beneficial effects (regarding nutrition) of baby massage should be evaluated further.

RECOMMENDATIONS FOR MEDIA

The reporting and projecting of TPNC to the ommunity is a major responsibility of the media.

If used judiciously, media can be vary ielpful to project TPNC in the right perspective by using regional languages to convey messages and programs.

The media can be used to propagate wide spread use of beneficial use of TPNC from one part of the country to another, provided an integrated approach is used for supporting the particular TPNC.

Media can launch campaigns against blatant advertisement by manufacturers of formulations of doubtful use and safety in newborns once facts are established by using scientifically acceptable methodology (SAM) in research.

RECOMMENDATIONS FOR RESEARCH

There is a felt need of research in TPNC because despite a sample survey and review of literature (even when subjected to open-minded discussions) we cannot classify all TPNC into harmful, potentially harmful, innocuous and beneficial practices. For such a classification and an ongoing evaluation and research using SAM is mandatory.

The research is to be project-oriented, conducted mostly in the community or when necessary in the hospitals. There is a strong need for integrated research at these levels. The integrated approach would utilize the collective expertise of neonatologists,biochemical and pharmacology experts along with professionals from community medicine. Such an approach should also take into account the view points of both ISM and MM professionals, retaining SAM for research (since there is a definite need for technology transfer regarding SAM for research to ISM), and should be worked out with regional and national forums.

Additionally, apex professional bodies (like NNF, IAP) should specify nationally relevant research areas on the basis of widely prevalent TPNC. The government of India, WHO and UNICEF, alongwith other NGOs should support this research.

The various aspects of widely prevalent TPNC which are supported by ISM or other systems of traditional medicine but not by MM must be jointly investigated using SAM for research (as outlined above).

Data from voluntary agencies and professional bodies can be collected for many avenues (e.g., ongoing evaluation of TPNC). Many of these agencies lack SAM but can be of great help under proper guidance. Experience and knowledge of local people should also be assessed and utilized (e.g. for evaluation of herbal medicines in cord care).

RECOMMENDATIONS FOR TRAINERS AND TRAINEES

The general lack of proper orientation towards TPNC among professionals from MM,ISM and other traditional systems of medicine stems from two basic facts:

a) Neonatology has been given a scant coverage in the undergraduate training of medical students in all systems of medicine.

b) Proper evaluation and analysis of status of TPNC on the basis of existing scientific background has not been carried out, so that such knowledge has never been imparted in neonatology, even when the relevant chapters are taught (e.g. ,care of the normal newborn).

Therefore at suitable stages of medical education and training these considerations must be translated into the curricula. The future trainers thus hopefully would be able to impart these concepts to trainees (medical students, health workers, nurses and others).

TRADITIONAL PRACTICES OF NEONATAL CARE, AN AYURVEDIC PRESPECTIVE (सद्योजात शिशुचर्या)

Ila Deshpandey* , Jyotsana Rawal,Parul Joshi*****

It is believed that TPNC which are prevalent in society are based on ISM literature, eg. use of sickle on knife etc. for cord cutting, application of turmeric on cut cord, kajal application in neonate's eyes, administration of janamghutti to neonate and so on. It is not entirely true. TPNC are different from time to time and place to place. In ISM, scientific and detailed description is given for neonatal care. (शिशुचर्या) These practices, which are mentioned in ISM should be scientifically evaluated and recommended for the society as they are simple and acceptable to masses as traditional practices. Other unscientific and harmful practices should be discouraged.

Following are important points for discussion.

I Resuscitation of newborn.
II Cord care practices.
III Prelacteal feeds and baby bath.
IV Colostrum and breast feeding.
V Lactagogues.
VI Wet nursing.
VII Baby massage.
VIII Kajal application.
IX Janam ghutti.
X Nose and Ear piercing.

Besides these, so many drugs and drug combinations are mentioned for prevention and treatment of neonate/infants' diseases or complications. Some references are available for prevention of infections. These drugs are not to be taken orally, but should be suspended or kept around the baby for prevention of infections.

All these specific references, along with practices and medicines are to be discussed with their original Sanskrit text - herewith for scientific evaluation.

RESUSCITATION (प्राणप्रत्यागमनम्)

According to ISM, before cutting the cord, the baby is to be resuscitated. Original verses are given as under :-

अथ जातस्य उल्बमपनीय मुखंच सैन्धवसर्पिषा विशोध्य ...।
(सु. शा १०/१०)

घृताक्तं मूर्ध्नि पिचुं दद्यात् । (सु. शा १०/१०)

स्नानोदकग्रहणाभ्यामुपपादयेत् । च. शा ८/४२

उदकग्रहणं मलमार्गशौचार्थम (पद – च. षा ८ ४३)

अथास्य तालु–ओष्ठ–कण्ठ–जिह्वा प्रमार्जनम् आरभेत्– अङ्गुल्या सुपरिलिखिवतनखया सुप्रक्षालित–उपधानकार्पास पिचुमत्या । प्रथमं प्रमार्जित आस्यस्य चास्य शिरस्तालु कार्पास पिचुना स्नेहगर्भेण प्रतिसंछादयेत् । (च.शा८/४३)

ततो अस्य अनन्तरं सैन्धवोपहितेन सर्पिषाकार्य प्रच्छदर्नम्।
(च. शा ८/४३)

तद्यथा–अश्मनो: संधट्टनं कर्णयोर्मूले, शीतोदकेन उष्णोदकेन वा मुखपरिषेकः, तथा स क्लेशविहतान् पुनर्लभेत ....।
(च. शा ८/४२)

* Prof. & Head Department of Prasuti-Tantra, Akhandananda. Govt. Ayurvedic College ,opp. Victoria Garden, Laldarwaja, Ahmedabad. (Guj.).
** Asstt. Resaerch Officer, F.W.R. unit (under central council for reasearch in Ayurveda and siddha, New Delhi) P.P. unit, New Civil Hospital , Ahmedabad-380016 (Guj.).
***Demonstrator, Akhandananda Ayurvedic college, Ahmedabad (Guj.).

अथास्य दक्षिणे कर्णे मन्त्रमुच्चारयेद् इदम् –
अङ्गादंगात् संभवसि हृदयादभिजायते ।
आत्मावै पुत्रनामासि स जीव शरदां शतम् ।
शतायुः शतवर्षेऽसि दीर्धमायुरवाप्नु हि ।
नक्षत्राणि दिशो रात्रिः अहश्च त्वाभिरक्षतु ।
अ. सं ३. १/४
अ. ह. ३. १/३.४

कृष्णकपालिकासूर्पेण चैनमभिनिष्पुणीयुर्यद्यचेष्टाः स्याद् यावत् प्राणानां प्रत्यागमनम् । च. शा ८/४२

Resuscitation of neonate is divided in two parts (1) Routine (2) For unconscious or asphyxiated child.
Resuscitation should be done routinely as following steps.

a) Routine: (विशोधनं)

1) Cleaning of the face and oral cavity should be done with ghee (धृत्) and rock salt (सैंधव).

2) Then a swab soaked in Balatail (बलातैल) should be applied on head. (पिचुधारण) (Specially vertex)

3) The face (including eyes, ears, mouth and nose) should be cleaned with water. (मुखपरिषेकः)

4) Anal and urethral orifices should be cleaned. (उदकग्रहणं–मल मूत्रमार्ग शौचार्थम्)

5) Tongue,lips,throat and palate should be gently cleaned with right index finger (which should have nails cut) properly washed, dried and wrapped with cotton. (प्रमार्जनम्)

6) Again ghee and rock salt is to be given for emesis to vomit-out the swallowed amniotic fluid. (छर्दनम्)

b) Unconscious child:

1) If the baby does not cry, or baby is asphyxiated two stones should be striken near the base of ear. (अश्मनयोः संघट्टनं कर्णयोः मूले)

2)Hot and cold water (according to season) should be sprinkled over the face of neonate. (मुखपरिषेकः)

3) Fanning with blackened broken earthern pot or with winnowing basket made of KrishnaKapalika (कृष्णकपालिका) should be done

c) Afterwards :

Some Mantras (मन्त्राः) are mentioned, which are to be spoken near the ear of neonate for bestowing longevity. The meaning of this mantra is as under.

"Thou is born from different body parts and from the heart. Atma itself is named as son. Thou live for hundred years, in which each year should be of hundred years (total 10,000 years.) Thou attain longevity. May the nakshatras (planets) dishas दिशा (directions) nights and days protect thee". (जातकर्मणि)

OBJECTIONS

ISM does not support the following which are practiced as TPNC.

Excessive physical stimulation.
Flicking of the sides.
Crushing of the placenta.

RECOMMENDATIONS

Fanning with KrishnaKapalika Surpa, striking of the stones near the base of ears and cleaning of the mouth, upper respiratory and alimentary canal with rock-salt and ghee can be used in the absence of suction of mucous cathether etc. Hence ISM recommends the above two procedures to be

given in the training.

CORD CARE PRACTICES

After completing the resuscitation as routine, and to the asphyxiated child, cord should be cut.

अतस्तस्या: कल्पनविधिमुपदेक्ष्याम: – नाभिबन्धनात् प्रमृत्यष्टाङगुल मभिज्ञानं कृत्वा छेदनावकाशस्य दव्योरन्तरयो: शनैर्गृहीत्वा तीक्ष्णेन रौकजातायसानां छेदनाना– मन्यतमेनार्धधारेण छैदयेत..... ।

(च.शा ४/४४)

प्रत्यागतप्राणस्य च प्रकृतिभूतस्य नाभिनालं नालाभिबन्धनात चतुरङगुलस्योर्ध्वं क्षौमसूत्रेण बध्वा तीक्ष्णेन शस्त्रेण वर्धयेत्।

अ.सं ३.१/५

तामग्रेसूत्रेणोपनिबध्य कण्ठेऽस्य शिथिलमवसृजेत् ।।

च.शा ८/४४

अवसज्जेत् नाभि: कुष्ठतैलेन सेचयेत् ।।

अ.सं ३. १

(सु. शा १०/१२–त्र्यदास)

तां लाघ्र–मधुक प्रियंगु सुरदारु हरिद्राकलसिद्धेनतैलेन अभ्यज्यात्, एषामेव तैलोषधानां चूर्णेन अवचूर्णयेत् ।।

च. शा ८/४४

अथ बालं

– प्रणीतोपासनीयं चावेक्षेत् । सु. शा १०/२०
– क्षौम कार्पास .....। सु. सू १८/६
– अग्नितप्तेन शस्त्रेण छिन्दयात् । सु. चि. २/२५
– अविपरीतबन्धे वेदनोपशान्तिरस्रक् प्रसादो मार्दव च । सु. सू १८/१६
– अबध्यमानो दंशमशकतृण काष्ठोपलयांशु शीतवातातपप्रभृतिभि: विशेषैरभिहन्यत । व्रणौ विविधवेदनोपद्रुत दुष्टतामुपैत्यालेपनादीनि चास्य विशोषमुपयान्ति । सु. सू १८/१७
– पृष्ठोदरोर: स विबन्धम् । सु. सू १८/१७

Cord care practices are divided in three procedures :-

i) Cord cutting.
ii) Cord tying.
iii) Cord dressing.

Cutting of the cord :- Cord should be measured 4 fingers(2 inches) from the baby's umbilicus and tied the first thread. Tie the second thread at 8 fingers(4 inches). Then hold gently between the two threads and cut the cord with the knife or sickle shaped (अर्धधारशंस्त्र–मण्डलाग्रशस्त्र) sharp edged instrument, which is made of gold, silver or iron. Silken-soft and pure thread should be used for tying. Instrument should be purified in fire.

Tying of the cord :-

The thread used for tying the end of the stump goes around the neck so that stump end faces upwards thereby eliminating chances of bleeding and oozing.

Dressing of the cut cord

Dressing materials advised are different for wet and dry cords.
Lodhradi churna (Powder of (लोध्रादियोग) should be applied on wet cord.
Kushtatial or Lodhraditial (कुष्ठतैल or लोध्रादितैल) should be applied on dry cut cord.

Baby binders

Binders are not mentioned in the ISM for cut cord. But according to above mentioned reference of Acharya Sushruta, the child should be treated as a wounded person. The cut end of the stump should be gently dressed with soft cotton

or silk cloth. The knot of bandage should not come on the wound or be a hurdle to the baby. The dressing also helps in avoiding infection from different types of germs, dirt, dust, blowing air irritation etc. and thus helps timely healing. Then the baby should be wrapped in a soft, silky cloth and allowed to rest.

OBJECTIONS :

Preservation of shed cord is not mentioned.
Bamboo spike etc. are not advised for cutting the cord.
Kumkum, cowdung etc. are not advised in routine umbilical cord dressing.
Unsterile instruments are not to be used for cord cutting and dressing.

RECOMMENDATIONS

Instrument
The sickle shaped instrument advised in the ISM if modified is similar to the (umbilical) cord cutting scissors used by the MM. So we advise to continue the use of sterile and sharp knife or sickle.

Dressing Material :

Evaluation by double blind method on Haridra(Turmeric) has been done. Its antibiotic and anti-inflammatory properties in general diseases are proven. In the same way research work should be done on turmeric and other drugs like Lodhra(Symplocos Ralemosa) Priyangu (Callicarpa Macrophylla), Kustha (Saussurea Lappa), Suradaru(Cedras beodara) Panchavalkala (Five Ficus) etc. for cord dressing.

PRELACTEAL FEEDS AND BATHING

All Acharyas like Charak, Sushruta, Vagbhatta, Kashyapa appreciate giving prelacteal feeds before giving breast feeding. It is called the 'Jatkarma Samskar' or 'Suwarna Prashan Samskar'.

– तद्यथा–मधुसर्पिषी मन्त्रोपमन्त्रिते यथाम्नायं प्रथमं प्राशिनुं दद्यात् । च. शा ८/४६
– आमथ्य मधुसर्पिभ्यां लेहयेत् कनकं शिशुम् ।
सुवर्णप्राशनं ह्येतन्मधाग्निबलवर्धनम् ।
आयुष्यं मंगलं पुण्यं वृष्यं वर्ण्यं ग्रहोपहम् ।।२५
मासात् परममेघावी व्याधिभिर्न च धृष्यते ।
षड्भिर्मासैः श्रुतधरः सुवर्णप्राशनाद्भवेत् ।। २६
का.सं.स. लेहेध्याय

अङ्गादंगात् संभवसि हृदयादभिजायते ।
..... त्वाभिरक्षतु ।।
अ.ह ३.१/३–४

मधुसर्पिरनन्ता ब्राह्मीरसेन सुवर्णचूर्णमङ्गुल्यानाभिक्या लेहयेत् ..... सु. शा १०/१०

गर्भाभ्भिः सैन्धववता सर्पिषा वाभयेत्ततः ।।
अ. ह. ३. १/१०

ततो बलातैलेनाभ्यज्य..... सु. शा. १०/१२
शिरसि स्नेहपिचुना प्राश्यं चास्य प्रयोजयेत् ।
अ. ह. ३. १/५
क्षीव्रक्षकषायेण सर्वगन्धोदकेन वा रूप्यहेमप्रतप्तेन वा बारिणा स्नापयेदेनं .... वा कोष्णेन यथाकालं यथादोषं यथाविभवञ्च । सु. शा १०/१२
अथ बालं क्षौमपरिवृत्तं क्षौमवस्त्रास्तृतायां शय्यायां शाययेत् ।। सु. शा. १०/२०

Now the baby should be given paste of ghee, honey or ghee, honey and gold bhasma. The father is supposed to give this Prashana while chanting the Mantra (stanza).... अंगाद् अङ्गाद संभवसि...

It increases the life span, intellect, strength, digestion-fair complexion and resistance power against diseases.

Then rock-salt and ghee are again given for inducing vomiting.

After giving the Prashana, the baby should be massaged with 'Balatail' and cover the Brahmarandhra (anterior fontanelle) with oily tam-

oon.

he baby is now bathed with hot or luke warm de-
oction according to season, prepared with the
icus group of drugs and some fragrant drugs
vhich are easily available. If possible, a heated
old or silver piece should be soaked in the above
repared decoction.

he child should be wrapped with soft silken new
loth and made to sleep covered with soft clothes.

COLOSTRUM AND BREAST FEEDING

Mother's feed is best for the child. After giving
he prelacteal feed, ISM suggests giving mother's
milk. Before giving the feed, a few drops should
be discarded at every feed, for purifying the
tubules.

ातुरेव पिषेत स्तन्यं तत् परंदेह वृद्धये ।
स्तन्यधात्र्यावुभेकार्ये तत संपदि वत्सले ॥
अ. ह. ३. १/१५

तद्यथा ..... स्तन्तमत उर्ध्वमेतेनैव विधिना दक्षिणां
पातुं पुरस्तात् प्रयच्छेत् . च. शा ८/४६

तस्मात् प्रथमेऽह्नी मधुसर्पिरनन्तामिश्रं मन्त्रपूतं त्रिकालं
पाययेद् द्वितीये लक्ष्मणासिद्धं सर्पिस्तृतीये च ।
ततः प्राङनिवारितस्तन्यं मधुसर्पिः स्वपाणितलसम्मितं
द्विकालं पाययेत् । सु. शा. १०/१४

ततः प्रशस्तायाः तिथौ शिरस्नातमहत वाससमुदमुखं
शिशुमुपवेश्य धात्री प्राङमुखोपमुपवेश्य दक्षिणं स्तनं
धौतमीषत्परिस्त्रृतमभिमन्त्रस्य मन्त्रेणानेन पाययेत् ॥
सु. शा. १०/२२

धमनीनां हृदिस्थानां विवृत्तवादनन्तरम् ।
चतूरात्रात् त्रिरात्राद्रा स्त्रीणां स्तन्यं प्रवर्तते ॥
सु. शा. १०/११

अपरिस्त्रृतेऽप्यतिस्तब्धस्तन्यपूर्णस्तनपानादुत्स्नु –
हितस्त्रोतसः शिशोः कासश्वासवमीप्रादुर्भावः । तस्मात्
एवंविधं स्तन्यं न पाययेत् ॥
सु. शा. १०/२४

प्रसूतासु च नारीषु बलेन सह सूयते ।
तेन स्त्रोतोविशुद्धिः स्यात् क्षीरमाशु प्रवर्तते ।
तस्मात् सद्यः प्रसूतायां जादते श्लैष्मिकं पयः ।
तेन कठिनतां दाति तस्मात्तत् परिवर्जयेत् ॥
हारीतसंहिता प्र अ. सू ११–१२

Acharya Charak advised breast feed on the very first day, but Acharya Sushruta suggests giving breast feed on the 3 rd day. After giving Prashan with ghee and honey, right breast should be offered for sucking. Before giving breast milk, breast should be slightly squeezed or milk should be drained. Gentle squeezing of milk before lactation ensures patency of lactiferous tubules and prevents complications like vomiting, dyspnoea, cough , fever etc. in the neonate which can occur if the breast milk is not discarded. It is clear that squeezing of milk is only for opening of tubules, which is essential.

So it does not mean that colostrum is discarded. So first feed of breast milk should be encouraged in mothers. It provides easy and good growth and strength of different parts of body, longevity as well as good health to the child.

GALACTOGOGUES

It is generally believed that the galactogogues are only breast milk promoters. But according to ISM, medicines purifying breast milk is to be given before giving galactogogues or with the galactogogue.
These can be classified into four groups :-

1) Psychological
2) Physical
3) Dietetics
4) Medicines.

1) Psychological

Feeling affection for the child. The mother should create a pleasant mood.
She should avoid anger, depression, sexual desire, fears etc.
Sushruta says that as the thought of the female partner, on hearing her voice or on feeling her touch, the male gets stimulated and the semen is

discharged so is the psychological impact of the child to his mother i.e. the sight or the sound or the touch of the child is enough to promote lactation in the mother.

आहार रस योनि त्वादेवं स्तन्य मपि स्त्रिया: ।।
तदेवापत्यसंस्पर्शा दृर्शतात्स्मरणादपि ।
ग्रहणादप्यु रोजस्य शुक्रवत्संप्रवर्तते ।।
स्नेहो निरन्तर प्रस्त्रवे हेतुरुच्यते ।।१९।। (सु. नि १०)

2) Physical

Mother should get complete physical rest. Physical exertion, hunger and sexual excitement should be avoided.

कर्शन..... कामादिभि: स्तन्यनाश: । (अ. सं. ३. १)
अनायास श्वेति..... । (च. शा ८)

3) Diet

Proper intake of food can give nourishment to the mother's body. The nutritionally healthy mother gives healthy milk. Hence diet plays a major role in lactation.

आहार रस योनि त्वात् एवं स्तन्य मपि स्त्रिया: ।
सु. नि १०/१९
अथास्या: क्षीरजननार्थं ..... यव गोधूम शालि षष्टिक मांसरस सुरा सौवीरक पिण्याक लशुन मत्स्य कसेरुक शृगांटक..... कालशाक प्रभृतीनि बिदध्यात् ।
(सु. शा. १०)
क्षीर जननानि तु मद्यानि सीधु वर्ज्यानि ग्राम्या नूपौदकानि च शाक धान्य मांसानि द्रव मधुर अभ भूयिष्ठा श्चाहारा: ..... क्षीरपानं ..... वीरण शालि षष्टिकेक्ष्व क्षु बालिका ..... कषायाणां च पानभिति क्षीर जननान्युक्तानि ।।
(च. शा ८)
पाक्यं गुड विडोपेतं सधृतं शालि माशयेत् ।
अपि शुष्क स्तनीनां तत् क्षीरोपजननं परम् ।।
(का. सू. १९)

Wheat, rice (Shali, Shashtik), gud, oil, ghee, milk, leafy vegetables, mutton soup, garlic, onion, fish, etc. with sweet taste are recommended.

Avoid excessive fat free diet with sour, salty, astringent tasting foods.

4) Medicines

If the above measures fail, medicines are to be given.

वीरणशालि षष्टि केक्षु वालिका दर्भ कुश काश गुन्द्रेत्कटक त्रण मूलानीति दशेमानि स्तन्टा जननानि भवन्ति ।
(च. सू ४)
पाठा महौषध सुरदारु मुस्त मूर्वा गूडूची वत्सक फल किरात तिक्तक कटु रोहिणी सारिवा इति दशेमानि स्तन्य शोधनानि भवन्ति । (चू सू ४)
मूर्वा व्योष वशकोल जम्बूत्वक्दारु सर्षपा: ।
सपाठा मधुना लोढा: स्तन दोषहरा: परम् ।।
(अ. हु. उ २)
वहादीनां च वृक्षाणां क्षीरिकायाश्च पलकलम् ।
पाक्य: कषाय: क्वथित: क्षीरं तेन पुन: श्रुतम् ।।
पाक्यं ..... क्षीरोपजननं परम् ।।(का. सू १९)
शालि षष्टिक दर्भाणाकुरा गुन्द्रेत्कट स्य च ।
सारिवा वीरणेक्षूणां मूला नि कुश काशयो: ।।
पेयानि पूर्व कल्पेन श्रेष्ठं क्षीर विवर्धनम् ।
स्वभावनष्टे शुष्के वा दुष्टे साध्वीक्षिते हितम् ।।
(का. सू १९)
क्षीरिण्य श्चोषधय: वीरण षष्टि शालिकेक्षुवालिका दर्भ कुश काश गुन्द्रेत्कटमूल कषायाणां च पानम् । च
क्षीरजनना नि तु मद्यानि सीधु वर्ज्यानि ग्राम्यानुपौदकानि..
क्षीरिण्य श्चौषधय: क्षीरपानं ....वीरण शालि षष्टिके क्ष्व क्षुबालिका दर्भ कुश काश गुन्द्र इत्कटमूल कषायाणां च पानमिति क्षीरजनना न्युक्तानि ।। (च. शा ८)
भूमि कुष्मान्डमूलस्य क्षीर पिष्टस्य या रसम् ।
पिबेत्सशर्करं तस्या: क्षीरं बहु विवर्धते ।।
शतावरी क्षीरपिष्टा पीता स्तन्य विवर्धिनी ।
वनकार्पासकेक्षूणां मूलं सौवीर केण वा ।
विदारि कन्दं सुरसा पिबेद्वा स्तन्य वर्धनम् ।। (यो. २.)

ISM has many medicines like certain roots -

Vidarikand (Pueraria Tuberosa), Shatavari (Asparagus racemosus), Bhumikushmanda etc. to be given with milk or with medicated alcoholic preparations.

WET NURSING

It is believed that Ayurvedic treatment was mainly given to kings and their families. The Doctor of those era also called "Rajvaidhya", Wet nurse was arrangedfor breast feeding of the royal and elite children for breast feeding. Therefore detailed description of wet nurse, is available in Ayurvedic texts. Before appointing her she should be thoroughly examined.

There is no other substitute for mothers milk, but due to some reasons, wet nurse should be arranged.

The reasons are

मातरि मृतायां रुग्णायां स्तन्यव्यापदि वा तस्यां आवश्यकतऽस्ति । अथवा तत्रापि गव्यंआजं वा दुग्धं दीपते कुमारस्य पानाय, वर्तिकाद्वारेण
पानाय यदि बालस्य विदध्यादुपमातरम् ।
सुविचार्य गुणान् दोषानां कुर्याद्धात्री तददशीम् ।।

Wet nursing is promoted in special situations only where the mother has died, seriously ill or having some serious breast disease or abnormal milk.

Physiological and Psychological assessment of wet nurse should be carried out.

Wet nurse should be having the following qualities

She should be

* identical in Varna (similar in caste); (यथावर्ण)
* of average height; (मध्यमप्रमाणा)
* middle aged; (यौवनवस्था)
* free from impatience; (निभृता)
* free from diseases; (अनातुरा)
* not possessing deficient or accessory body parts; (अव्यङगा)
* non-addict; (अव्यसना)
* beautiful; (अविरूपा)
* free from disgust; (अभ्रुगुप्सिता)
* similar in living place and caste; (देशजातीय)
* not mean minded; (अक्षुद्रा)
* not indulging in mean acts; (अक्षुद्रकर्मणी)
* born in high family; (कुलेजाता)
* affectionate to the child; (वत्सला)
* having alive child; (जीवितवत्सा)
* having alive male child; (पुंवत्सा)
* having good amount of breast milk; (दोग्धी)
* over cautious; (अप्रमत्ता)
* not habituated of sleeping over dirty places or excrements; (अनुच्चारशायिनी)
* not married in low caste; (अनन्त्याविसायिनीं)
* expert or skillful in nursing; (कुशलोपचारा)
* pious; (शुचिम्)
* clean and having hatred from unpiousness or uncleanliness; (अशुचिद्धेषीणी)
* having or possessing good quality of breasts and milk;
* chaste or cellbate; (ब्रह्मचारिणी)
* wearing clean and white garments; (शुक्लाम्बराच)
* free from eight doshas (too tall or too short in height etc.); (दीर्घहस्यादिदोषाष्टकरहिता)
* Her teat (nipple) should be neither too high not too low; (अलम्बोर्ध्वचुचुका)
* not thin; (अकृशा)
* not be greedy; (अलोलुपा)
* not proud; (गर्ववर्जिताम्)
* having pure breast milk; (प्रसन्नक्षीरा)

Some disqualifications also described which produce some complications, e.g.

" One who is striken with grief, is hungry, tired, always diseased , pregnant, afflicted with fever and consumes diet which produces indigestion and diseases in the child.

BABY MASSAGE AND EXERCISE

In Ayurveda massage (अज्यंग) has got its own importance. Before giving bath, massage with medicated oil or tiltail should be given to neonate. A medicated oil ''बकातैल'' is known to be best for neonates massage. Massage is a constructive, nurturing response to a baby's inherent need for physical contact.

तो बलातैलेन् अभ्यज्य

सु. शा १०/१२

तथा शरीरअभ्यङगाद्दढं सुत्वक् च जायते ।
प्रशान्तमारूताषाधं क्लेशव्यायाम संसहम् ।।
स्पर्शनेऽभ्यधिको वायु: स्पर्शनं च त्वगाश्रितम् ।
त्वच्यश्व परमभ्यङगस्तस्मात्तं शीलयेन्नर: ।
न चाभिधाताभिहतं गात्रमभ्यङगसेविन: ।
विकारं भजतेऽत्यर्थं बलकर्मणि वा त्वचित् ।।
सुस्पर्शोपचिताङश्च बलवान् प्रियदर्शन: ।
भवत्यभ्यङगनित्यत्वान्नरोऽक्पश्वर एव च ।।

च. सू. पू/८६ to ८९

During the early months of life babies uncurl from their position and as they do so they stretch their muscles, open their joints and co-ordinate their movements. Massage is especially suited in this period. ISM describes very good and beneficial properties of massage in detail. He advises massage as daily routine. Massage stimulates the circulatory and immune systems and benefits the heart rate breathing and digestion. It provides a perfect balance and support to the development of the neonate as they co-ordinate and strengthen. Oil massage of the body imparts a glossy softness of the skin, guards against the aggravation of the 'vata' and 'kapha;' improves the complexion and strength and gives a tone to the tissues of the body. It also improves the tolerance to hardship and induction of physical strength. Regular oil massage slackens the onslaught of ageing. Moreover, unction, over the body, eliminates bad smell, cures heaviness, drowsiness, itching and removes undesirable dirt and unpleasantness due to sweating. It also cultivates the resilient elastic duality of the muscles and improves their ability to relax both in action and at rest.

Massaging a baby regularly will also give the opportunity to keep a check and discover any areas of the body that consistently give rise to discomfort, pain or tension. Moreover, parents develop their sense of touch and cultivate close physical contact with their child. They remain literally, 'In touch' with their child. This encourages security, confidence and independence in the child too.

Massage should be performed by mother herself, not by servant. It makes the close contact to each other and creates affectionate relation with each other.

EXERCISE

Exercise should not be given to neonate. During massaging the baby, gentle pressure goes to neonates muscles, joints etc. It creates flexibility and co-ordination of muscles. So special exercise should be restricted.

पातपित्तामयी बालो वृद्धाऽजीर्जी च तं त्यजेत् ।

अ. पू सू. २/११

NOSE AND EAR PIERCING

Nose piercing is not mentioned in I.S.M. Ear piercing is recommended at the VI or VII month of life, not during the immediate neonatal period.

रक्षा भूषण निमित्तं बालस्य कर्णो विध्येते ।
तौ षष्ठै मासि सप्तमे वा शुक्रपक्षे प्रशस्तेषु तिथिकरण

मुहूर्त नक्षत्रेषु कृतमंगल स्वस्तिवाचनं धात्र्यङ्के कुमार धराङ्के वा कुमारमुप वेश्य बालक्रीडनकै: प्रलोभ्याभि सान्तवयन् भिषग् वामहस्तेनाकृष्य कर्ण दैवकृते छिद्रे आदित्य कराव भासिते शनै: शनै: दक्षिण हस्तेनर्जु विध्येत्, प्रतनुकं सूच्या, तहल मारया, पूर्व दक्षिणं कुमारस्य, वामं कन्याया: तत: पिचुवर्ति प्रवेश्य सम्यग्द्धिमाम तैलेन परिषेचयेत् ॥ (सु. सू. १६/२)
शोणित बहुत्वेन वेदनया वाऽन्यदेशविध्दमिति जानीयान्निरुपऽवतया तद्देश विध्दमिति ॥ (सु. सू १६/३)
The ear is pierced for the protection from the omens and for wearing the ornaments. The ceremony is performed during the VI or VII month of the birth, on an auspicious day after performing religious rituals. The child is seated in the lap of the mother , wet nurse or the male servant. Toys like horses , elephants and sweet eatables should be given to the child to lure him and the doctor is supposed to pierce the ear by hiding it with his left hand, the anatomical orifice facing the sunlight and properly drawn so that it is easily visualised and then with the right hand a sharp needle is passed gently through it. The right ear is pierced first in the male child while the left in the female. On observing that the ear is properly pierced , a cotton suppository is passed through it and the ear is soaked in the raw oil.

The signs of proper piercing are -
not much bleeding and no pain. If these symptoms are not found then it denotes that the ear is not properly pierced.

KAJAL APPLICATION

Kajal application to the neonate is very prevalent in TPNC. It appers to be more of a tradition. No specific recommendations are found in ISM for its use in neonates. Two types of Anjana application are described in ISM -

1) सौवीराञ्जन Lead sulphide,
2) रसांजन Herbal prepared from Turmeric.

सौवीरमजनं नित्यं हितमक्ष्णोस्ततो भजेत् ।
सौवीरमजनं ग्राहि स्निग्धञ्च तू हितोपमम् ।
रक्तपित्तप्रशमनं नैत्रामयहरं परम् ॥

चक्षुस्तेजोमयं तस्य विशेषात् श्लेष्मतो भयम् ।
योजयेत्सप्तरात्रेऽस्मात्स्त्रावणार्थं रसाजनम् ॥
अ. सू. २/५

अत उर्ध्वं शरीरस्य वीर्यमक्ष्यजनादिकम् ।
स्वस्थवृत्तिमक्षिप्रेत्य गुणत: सम्प्रवक्ष्यते ॥ (च. सू. ५/१४)

तच्च नित्यं प्रयुञ्जीत स्वास्थ्यं येनानुवर्तते ।
अजातानां विकाराणमनुत्पत्तिकरं च यत् ॥
च. सू पू/१३

दार्वीभ्याथसमं क्षीरं पादंपक्त्वा पदाधनम् ।
ततो रसांजनम् रूयातं नेत्रयो: परमं हितम् ॥

रसांजनं कडु श्लेष्म विषनेत्राविकारनुत् ।
उष्णं रसायणं तिक्त छेदनं व्रणदोषकृत् । भा. प्र.

तिक्ता दारुहरिदा: स्याद्रूक्षोष्णा व्रणमेहनुत् ।
कर्णनेत्रमुखोद्भूतां रुजं कण्डू च नाशयेत् ॥ ध. नि.

पक्ष्मलं विशदं कान्तममलोश्वकमष्डलम् ।
नेत्रमजन संयोद्भवेच्चामलतारकम् ॥ सु. चि. २४/२१

Kajal is different from Anjana. The preparation of Anjana is in powder or in suppository form, while Kajal is prepared with some oily material like Ghee, Castor Oil etc. Kajal like oily preparations are not found in ISM. Application of Rasanjan (रसाञ्जन) which is prepared from turmeric is adviced once a week for secretion of eyes'doshas as daily regimen, prevents the diseases above the clavicle. It cures pain and itching sensation of the eyes. It should be applied at night.

RECOMMENDATION

Kajal or Anjana should not be used in neonatal

period. After or before using it, physicians advice should be taken . Commercial preperation of Kajal should not be used. Home made or standardised Anjana can be used with medical supervision. Ghee or castor oil should not be used while preparing Kajal. If Kajal is to be applied, prepare it in following way.

"Fill one small bowl with ghee and heat it on fire.Fire should also be used for ghee and cotton. It will blacken the base of the bowl. Tip of the washed first fingerr should be used for application."

JANAMGHUTTI

Janam ghutti is generally used at every house as home-remedy for better development of the child. It can be either home made or commercial. It is also given for some minor ailments like indigestion, diarrhoea, vomiting, constipation as well as in teething problems. It is also known as GHASARA (घसारा), means the drug is to be given by rubbing on stone with water, honey, cow milk or mothers milk.

ISM describes some Lehya (लेहा) which is to be taken as medications. Some simple drugs are also mentioned which are to be taken with ghee and honey. So janamgutti available at present is probably modified medicinal prepartions of Lehya used in ISM for common neonatal problems. It is also denoted in ISM to whom it should be given -

नियामयाश्व तनवो मृदुङ्गा ये च कर्शिता: ।
वर्च: कर्म न कुर्वन्ति बाला ये च त्र्यहात् परम् ॥
एवंविधाञ्छिशूनाह लेहयेदिति कश्यप: ॥
का. सू लेहाध्याय १६/१७

बाह्मी मण्डूकपर्णी च त्रिफला चित्रको वचा ।
शतपुष्पाशतावर्यौ दंतीनागबला त्रिवृत् ॥
एकैकं मधुसर्पिभ्यो मेघाजननमभ्यसेत् ।
कल्याणकं पञ्चगव्यं मेध्यं ब्राह्मीघृतं तथा ॥
वी. सू. ले. अ. १६/१७

Lehya should be given to the healthy baby, to the thin, emaciated, having soft organs, constipation, tympanitis of the baby etc. The drug, mentioned below is to be given separately with ghee and honey or with some medicated ghee like kalyankaghrit (कल्याणकघृत) panchagavya (पंचगव्यघृत), Brahmi ghrit (ब्राह्मीघृत) etc. for encreasing ittellact.

Sura, Hardi, Ghee etc prevalent in the society are mentioned either for single use or in combination.

No preparation recommended in ISM has opium, alcohol, belladona or toxic drugs. Suwa which is commonly used has some specific properties . It increases digestion , tonic for heart, cures constipation worms, increases appetite, cures cough , vatta and pitta.

Sowa-Anethum-Sowa -

मिक्षेया तद्गुणा प्रोक्ता विशेषाद् योनिशूलनूत् ।
अग्निमांद्यहरी हृद्या बद्धविट्कृभिशुत्रम्ह्त् ॥
रूक्षोष्णा पाचनी कासकृभिश्लेष्मानिलात् हरेत् ॥ भा. प्र.

Extract of Sowa (Dill water) is the main preparation of this drug.

Harde

Harde having Rasayanaguna (Rejuvenative properties). Haritaki is called it the mother of the child.

यस्यनास्तिगृहे माता तस्य माता हरीतकी ॥ भा. प्र.

So many types of harde are available. Small Harde is commonly used. Harde which is fried in ghee is used . Sometimes it is used as Ghasara (Harde is to be rubbed with water or milk on stone.) Harde increases intellect , promotes eye

vision, longevity, cures cough, diarrhoea, diabetes, piles, abdominal disorders, worms, malaria, tympanitis , heart disease etc.

हरीतकी पञ्चरसाऽलवणा तुवरा परम् ।
रूक्षोष्णा दीपनी मेध्या स्वादुपाका रसायनी ॥
चक्षुष्या लघुरायुष्या बृंहागी चानुलोमनी ।
श्वासकासप्रमेहार्श: कुष्ठ शोथोदरकितीन ॥
वैसर्प्यग्रहणीरोग..... मूत्राघातं च नाशयेत् ॥ भा. प्र

Apart from these so many other properties are described.

RECOMMENDATIONS :

The janam ghutti available at present should be evaluated scientifically . Toxic drugs like opium etc. should not be used. Janam Ghutti should be given to neonate under the observation of Ayurvedic doctors. Janam ghutti of unknown composition should be checked out. Original lehyas like, Kalyanakghrit, Samwardhanghrita, Brahmighrita etc should be prepared in its original composition and should be used in specific doses and time.

Simple purified drugs with honey and ghee, which is not harmful can be used after physician's advise.

TOYS

In ISM, some samskaras are mentioned for infant e.g. suvarnaprashan samskara, namkaran samskara, upveshanavidhi etc. In upweshana-samskara, acharyas have mentiones the toys for entertainment of the babies. This samskara is to be done on 6th month. So after 6th month toys are to be given. Very detailed description of toys like shape , material, space etc. are given . The original verses are mentioned herewith.

क्रीडनकानि खलु कुमारस्य विचित्राणि घोषवन्त्य भिरामाणि चागुरूणि चातीक्ष्णाग्राणि चानास्यप्रवेशीनि वाप्राणहराणि चाविन्नासनानि स्यु: । च. शा. ८/६३

बालक्रीडनकानि पिष्टमयानि, तद्यथा –
गौगश्वोष्ट्राश्वर्दभमहिषमेषच्छागमृगवराहवानररुशरभ
सिंह व्याघ्रकपितरक्षुवृत कूर्ममीन शुक सारिका कोकिल –
कल डक चक्रवाकहंस क्रौच सारसमयूर ऋकर–चकोर
कपिजल चरणायुधवर्तकाकाराणि शैलंकग्रह (क)
रक्षकयानक स्यन्दनक शलिलकाजिजिरिका खैरिके
शीवा तुम्बीका दुष्प्रवाहक भद्रक संचोललक पीठपन्दिका
दुहितृकाकुमारक गोल गन्दुकादीन्यन्यानि च स्त्री कौ
तुकानीति भिषक् तस्य मडिलं सन्निधाय वसुधायै अर्घ्यं
दत्त्वानेन मन्त्रेण ॥ का. सं. खि. १२/६

श्वातुषं घोषवच्चित्रमत्रासं रमणं बृहत् ।
अतीक्ष्णाग्रं गवाश्वादिमंगलयमथ वा फलम् ॥
अ. सं. ३. १

क्रीडाभूमि :

क्रीडाभूमि: समाकार्या निश्शस्त्रोपलशर्करा ।
वेल्लोषण कणाम्भोन्नि: सिक्तानिम्बोदकेन वा ॥
त्रासयेनाविधेयं च त्रस्तं ग्रहणन्ति हि ग्रहा: ।
वस्त्रापातात् परस्पर्शात् पालये कलंधनाश्व तम् ॥
अ. सं. ३.

Toys for the baby should be of different types. Some toys should make noise (music), they should be colorful beautiful, in appearence and light in weight. They should not be sharp. It should be bigger than the size of the mouth. Toys should not be a cause of death or create fear in the child. The toys should be prepared from flour.

All the shapes which are mentioned for the preperation of toys , are either animal shapes or bird shaped. It is mainly round shaped. The toys' shape should be like cow, buffalow, elephant, camel, horse, donkey, monkey, sheep, goat, deer, bear etc, or parrot, maina, sparrow, cock, peacock, cuckoo etc.

The child should play in such a place, where following articles should not be there e.g. sharp instruments, dust, mud, sand, water, etc. Other details are also described in ISM.

RECOMMENDATIONS :

Any type of toys should not be given to the neonate. After 6th month of age, the child can play with toys. The toys should be round shaped looking like animals. Due to round shape and big size, the child can not put it into the mouth, and injure the mouth. The material of the toys can be wood, mud, good quality rubber and unbreakable plastic. And the colour used, should be fast and nontoxic.

CRADLE

Cradles for the child is not mentioned in ISM. But the bedding of the neonate and infants are described in detail.

शयनासनास्तरण प्रावरणानि कुमारस्य मृदुलघु शुचि सुगन्धीनि स्युः ।
स्वेदमल जन्तुमन्ति मूत्रपुरीषोपसृष्टानि च वर्ज्यानि स्युः । असति संभवेऽन्येषां तान्येव च सुप्रक्षालितोपधानानि सुधूपितानि शुद्ध शुष्काष्युपयोगं गच्छेयुः ॥

च. शा. ८/६०

ततः प्रकृतिभेदोक्तरूपैरायुः परीक्षणम् ।
प्रागुदकशिरसः कुर्यात् बालस्य ज्ञानवान् भिषक् ॥
शुचि द्यौतोपधानानि निर्वलीनि मृदुनि च ।
शय्यास्तरणवासांसि रक्षोद्वर्धूपितानि च ॥

अ. ह. ३ १/२४–२५

शुचिनां शुक्लवाससा भवितव्यं इति ।

सु. सू. १९/२३

धूपनानि पुनर्वाससां शयनास्तरणप्रावरणानां च यवसर्षपातसीहिङ्गुगुग्लुवचा चोरकवयः स्थागोलोभी शहिलापलङ्कषा शोक रोहिणी सर्प निर्मोकाणि धृतयुक्तानि स्युः ॥

च. शा ८/६१

The bedding of the child should be soft, light in weight, properly washed, properly fomented (Ayurvedic autoclave), dried, clean, pure and white in colour with good fragrance. Those contaminated with sweat, urine, faeces, dirt, bacteria and insects should not be used. Barley, mustard, linseed, asafoetida, guggulu, sweet flag (Vacha), shredded skin of snake, etc. are the drugs to be used with ghee for fomentation.

RECOMMENDATIONS :

The neonate is to be kept near his mother, on her cot. As time passes, many changes occur. Hence in these days to serve the above objectire i.e. protection of the child from dirt, wind, dust and different germs, a cradle can be used.

BIBLIOGRAPHY

Charak Samhita sharirsthan Chapter-8 (ch.s.sh.8).
Charak Samhita Sutrasthan Chapter-5 (ch.s.su.5).
Sushrut Samhita Sharirsthan Chapter-10 (Su.s. sh. 10).
Sushrut Samhita Chikitsasthan Chapter-2 (Su.s.chi. 2).
Sushrut Sutrasthana Chapter-33,38 (Su.s.su.19,18).
Ashtang Sangrah Uttartantra -1 (A.s.u 1).
Ashtang Hriday Uttartantra - 1,2 (A.h.u.1,2).
Ashtang Hriday Sutrasthan 1.
Kashyap Samhita Sutrasthan Lehadhyay (Ka. s.su. Leh).
Kashyap Samhita Sutrasthan Kshirotejat (Ka.s.su.kshir).
Kashyap Samhita Chikitsasthan Dhatrichikitsa (Ka.s.chi.Dhatri)
Kashyap Samhita Khilsthan Jatakarmottariya (Ka.s.ki.jat).
Kashyap Samhita Sharir - 5 (Ka. s.sh. 5).

arita Samhita Prathamsthan - 8 (H.P. 8).
har Prakash (Bh. P.).
hanwantari Nighantu (Dh. Ni).
aj Nighantu (Kai. Ni.).
og-ratnakar (Y.R).
as tarangini (R.T.).
ravyaguna Vigyan (D.V.) Acharya P.V. Sharma.
Kaumarbhritya Tantra. Vd. N.S. Rajwade. Vd. A.D. Ahawale. Vd. S.G. Joshi.
Kaumarbhritya tantra - Vd. R.P. Dwivedi.
Balaveda - Vd. V.B. Athavale.
Ayurvedic Prasuti tantra and striroga Dr. P.V. Tiwari.
Medicinal Plants Vol. II (ICMR).Publication

Section – III

પ્રસૂતિ પરિચર્યા

પ્રસૂતિ દરમ્યાન કાળજી

REVIEW OF LITERATURE

A REVIEW OF TRADITIONAL PRACTICES IN NEONATAL CARE IN SOUTHEAST ASIA WITH SPECIAL REFERENCE TO INDIA : 1960 - 1991.

Mahesh Sharma, Madhulika,S K Kabra, SN Vani

One of the recent criticisms of health strategies in the third world has been that too little attention has been paid to what has been called "other cultures", i.e. alternative belief and action systems, often based on traditional ideas and practices. As a consequence much aid and many introduced ideas become inappropriate and get rejected(1). We attempt here to review the literature relevant to traditional practices in neonatal care (TPNC) in India and South East Asia. To facilitate assessment, TPNC have been grouped into antenatal, natal and postnatal practices. Some overlap with health behaviour, beliefs, attitudes and knowledge over traditional practices is inevitable.

ANTENATAL EVENTS

Socially, the 'girl child' is often unwanted, female feticide and infanticide are prevalent, chronically malnourished girls get married early (67.7% marry before the legal age of 18 years) and produce children during adolescence so that there is higher risk of adverse outcome of pregnancy(2), contributing to high maternal mortality rates, perinatal mortality rates and still birth rates which are virtually static for the last 15 years(3,4).

i) Practices related to antenatal care(ANC) utilisation and caretakers : Pregnancy is considered a physiologic process, and so antenatal care is not considered necessary(5). The recent results of a large multicentric study(6) have shown that pregnancy registration is less than 40%, thus almost 10- 25% of the pregnancies were documented not to be registered even when the antenatal clinic was located in the area and the project staff regularly visited the families for LMP(Last date of Menstrual Period) monitoring. This study also shows that less than 20% women complete the recommended number of antenatal visits, reflecting the indifference or inability of the women to go for antenatal check up: 15.6% urban and 1.5% rural had all the five scheduled antenatal events; 33.7% of urban and 56.6% of the rural women had 2 or less number of antenatal visits; and 11% of urban and 24.9% of rural women had no visits. Even in urban Maharashtra only 23% pregnant women registered for antenatal care because 30% had no knowledge about ANC and the remaining (majority) did not feel the necessity for supervision (7). In India the number of antenatal visits are not affected by distance , socioeconomic status , type of family and parity of women (6). We could not identify any traditional practice(s) that could prevent pregnant women from utilizing ANC. In current socio-cultural setup it appears that most women do not believe/know that ANC can significantly affect the outcome of their pregnancy. Also less than 40% of the population perceive ANM (female multipurpose worker) as a maternal and child health worker (6). Only a few dais offer antenatal care apart from conducting a delivery (8). It can be well

Department of Pediatrics, Civil Hospital,
B.J.Medical College, Ahmedabad.

presumed that antenatal advice in the majority is given by elderly ladies in the home or community and which might have been derived from hearsay and/or their own experiences. Also pregnancy is not declared at an early stage (for fear of evil eye or shyness) or is declared symbolically only in many parts of the country (9).

(ii) Practices for dietary changes during pregnancy and other related events. : A wide variety of traditional practices and health behavior are observed in this context. A recent national seminar (9) identified that majority of women take the usual diet as before pregnancy, 36.3% urban women and 26.9% rural women take less diet during pregnancy. This seminar has also identified geophagy (intake of baked soil, chalk), poor diet due to the fear of big sized baby , periodic or frequent fasts, strenuous work (lifting of heavy weights etc), nutritious food discarded as 'hot' and 'cold' and intake of irritants , purgatives (red chillies) , and alcohol and smoking as the harmful practices prevalent today. Deliberate avoidance of some foods and qualitative changes in food have been observed in 70-90% of mothers elsewhere too (10).

The traditions of widely varying dietary alterations during pregnancy probably originate from the Indian System of Medicine (ISM/ Ayurveda) which recommends specific and different dietary changes for each month of pregnancy (11). It appears from literature that region wise distortions have cropped up over centuries . Thus in Maharashtra papaya, banana, egg, mangoes are banned during pregnancy (7); in Gujarat 'hot foods', 'fried foods', 'sour foods' and 'cold foods' are avoided in last trimester of pregnancy for the fear of a heavy child and consequent painful labour (13); in Karnataka mothers are given traditionally rich and liberal diet through pregnancy and 'yogasana' is encouraged (14). According to one study (15) Indian women in lower socio-economic status work for an average of 13-18 hours a day. Tribal mothers continue to work even in late trimester because of belief that labour will be less painful (13). Some studies have shown that physical activity adversely affects not only the birth weight of the newborn but also the duration of pregnancy (16,17). Physical activity increases the energy expenditure, and therefore requirements; it may decrease blood flow to fetal and placental unit . Thus the 'caloric gap' is increased and this adversely affects the outcome of pregnancy (2), more so when the mother is required to fast traditionally (to protect pregnancy or to beget a male child) , avoids a number of foods , and is not offered calorie rich food; especially in the last trimester of pregnancy. In North East India (Manipur) practices are different (18) : after first three months of pregnancy the expectant mother is encouraged to eat green leafy vegetables, advised to avoid crowded places and hazardous work, salt and chilly are restricted , and extra diet are provided in various ways (special lunches and feasts). Still, as a whole, in the weaker sections of society , traditionally females get lesser and inferior share of food at home; food fads and taboos restrict a number of nutritious food during pregnancy (and lactation) , when the requirement is actually more (2). The local traditions (for diet) supported by Ayurveda are the following 'don'ts' during pregnancy (11) : banana, egg, groundnut, papaya , millet , ladyfinger, potato, mango, fish, rice, brinjal, jaggery, grams and so on; sexual intercourse during the pregnancy is also restricted. ISM also recommends that usual work be continued during pregnancy (11). The close relationship of local health traditions and ISM recommendations is exemplified in the above discussed practices . There is sufficient evidence to establish that all folk and tribal traditions of health care have a definite link with the 'science' of Ayurveda, the local health traditions are the 'prakrith' form whereas Ayurveda is the 'sanskrit' form . The practices born out of local traditions are said to have been coded in a 'scientific manner' based on 'univer-

l principles' to constitute Ayurveda. This rela-
on and the identity is not an accidental occur-
nce, it shows the symbiotic relations these two
ave with each other (19).

ii) Practices for bettering the pregnant ate or the offspring : Traditionally in North, entral and West India the later part of first regnancy (and delivery) is in the parental ome of the mother (7,9,10). This has been lentified as a useful practice (9), since the oman feels more at ease ,is relaxed, and gets ecessary care and attention in her own mother's ome (10). In North-East India mothers are not llowed to get exposed to unnatural and unfa-orable environment and circumstances, such s shocking news (death of near relative), any larming or frightening site, visiting seriously ll relatives and moribund or dead persons (18). n Karnataka mothers are usually prepared by lderly ladies to breast feed the baby (motional , psychological support, correction of etracted nipples), this has been identified as a seful practice . Not allowing the mother to go ut in an eclipse so as to prevent congenital nalformations has been considered a useful ractice (14).There are also a number of ritual-stic practices for sex prediction of the offspring apparently harmless prediction tests) and ractices for good physical characters of the aby (some specific foods are advocated) lo-ally prevalent in nearly all states of India 9,10,11). It is relevant here that in Turkey, the irm belief that events occurring during and even efore pregnancy will affect the status and well eing of the newborn makes women who give irth to abnormal or unhealthy children experience a deep sense of guilt(20). In Philip-pines, pregnant women are restricted from ying anything around the neck as a measure to prevent still birth from asphyxiation(21). In Punjab, at 7th month of pregnancy, a public declaration is made by celebrating it as 'Reianta' and clothes for the girl are given by the parents. A similar occasion in Karnataka is called 'Shree-manth'. Such traditions are also observed in rural Bengal amidst prayers - the logic is that once pregnancy is obvious the danger of abor-tion is over and prayers are held for a better outcome(22).

(iv) Practices related to preparation for delivery and easy labour. : In most societies in India some preparation of delivery is tradi-tional. In North East parts(18) after comple-tion of viability,parents procure rice, fish, wood, utensils and clothing, and construct a separate toilet for use during delivery and puerperium; after 37 weeks of pregnancy women are encouraged for domestic work which would facilitate engagement of presenting part and delivery(working in squatting position, hand pounding of paddy etc.). In Maharashtra a place for home delivery is generally selected as a secluded dark room so as to protect from breeze, strong light, infection, and 'evil eye'(7,10). ISM recommends that a tampon soaked in oil(Anuvasan basti) should be kept in the vaginal passage in the ninth month of preg-nancy so as to destroy pathogenic bacteria in the vagina, prevent puerperal sepsis, and soften the vaginal passage for easy labor(11). In Thai-land the custom of keeping the women near fire after birth of her child is important, and prepa-rations such as cutting of wood by the husband are to be done before birth(23).
Castor oil is given in Maharashtra to initiate labour pains and black tea or coffee, ginger-pepper decoctions are given to improve labour pains,herbal extracts and ghee rich food is given to sustain the strength for bearing down(7). The traditional posture in rural India labor is vertical, the woman in labor assumes squatting posture with hands resting on the foreground(24).

NATAL EVENTS

All cultures place great importance on birth but the way it is seen varies widely(20). It can be

seen as an event of illness or normal physiology, an open sexual event or one fraught with shame and secrecy, one meriting praise(and maybe even reward) or defilement(25). The ISM places great emphasis on the place of delivery, extraction of placenta, cutting of cord and so on(11) likewise traditional practices can be found in each of these specific areas.

(i) Traditions related to place and personnel for delivery: In urban slums in India about 60% of births take place in the community itself and over 80% of these deliveries are conducted by untrained birth attendants, unlike the rural communities where about 40% births are conducted by trained birth attendants(26). Home delivery remains the way of child birth in most rural and urban areas of the country, conducted by 'Dai' and/or relatives(27). In tribals of Madhya Pradesh labor management is done by traditional birth attendants or the relatives(13), in addition, in Manipur opinion of experienced elderly women is sought in case of unforeseen complications or doubts. In these parts of North East India delivery is conducted in a well selected isolated corner of the house, free from dirt, noise, polluted air and away from the bedroom of the husband, to maintain privacy. In every delivery a freshly prepared bed is used on the floor, made of dried straw and jute threads well covered with cloth(Ngoubong etc.)(18). In Maharashtra, majority of deliveries are conducted on the naked floor or mattress. Here majority of deliveries(26-58%) are conducted by close relatives, 9-16% by untrained dais and 20-36% by a trained dai/ANM/nurse. The traditional place of delivery in rural India is on the ground, usually without a mat, explanations for this is hard to come by - probably it symbolises union with or identity with earth(24). In 78.4% of families of rural Punjab,the reason for not calling a trained person to conduct the delivery has been their non-availability, though one cannot presume that a trained mid-wife will always be called if she is available nearby. Also most of the deliveries are usually conducted in rural North India in rooms having 'Kaccha' floor plastered with earth mixed with cattle dung(28). In tribals of Rajasthan the delivery is done on the floor in a lying down position, some ash or soil is spread on the floor of the delivery place(29).

(ii) Practices related to asepsis during delivery : A recent multicentric survey(6) points out that only water is used for hand washing before deliveries in 18.6% of urban and 28.5% of rural cases. In Manipur, a constant supply of boiled hot water is compulsory in every delivery(for perineal and vulval toilet) and during puerperium(18). In West India traditional birth attendants clean the room, wash their hands and break glass bangles as a time honored practice(7). In farm labourers of eastern Uttar Pradesh, a fire is put near the entrance of the room and each person entering the room has to foment the feet on the fire(30). In another study from Punjab all midwives(except one) washed their hands prior to delivery but a large number of them wiped their hands with a dirty cloth after washing. It seems as if they washed hands not because they believe in asepsis but probably it is a ritual that has to be gone through.Use of dirty rugs and old clothes as pads has been identified as a harmful practice(9). The ISM recommends that senior experienced women are to attend the delivery after a prior bath, they must also wear intact clothes(11). Frequent pervaginal examination to assess progress of labor and application of ghee to the interior of genitalia are usually practiced in Rajasthani tribals(29).

(iii) Practices related to cord care : a) Cutting and tying of cord. Use of unsterilised sharp instrument for cutting the cord, cutting the cord only after delivery of placenta and crushing of cord are dangerous practices identified(9). The village environments are quite conducive to the development of neonatal tetanus, moreover many trained midwives do not significantly dif-

s regards unsterilised cutting of cord from ained dais(25). All sorts of sharp instruts are used like sickle, cutting instrument ather workers, household scissors, knives, razor blades, silver of sago bark, 'villa' ecially Maharashtra) and so on (10, 30-34). n where women are aware of the advisabilof taking a new blade, they do not necessarboil the blade(24). The ISM recommends the cord is to be cut with a knife eight finger adths away from its root at the umbilicus, the s of the cord are to be tied with a thread, and ends of the thread should be loosely tied to neck of the child, further the cord is to be cut y when cord pulsations stop(11). In tribal ulations too the cord is cut after the placenta lso out(13). In West India, one of the reasons en for cutting the cord after separation of the centa is that the cord otherwise returns back the uterus and the placenta travels upwards, ches the heart of the woman, and kills her if s cut earlier(10). In Manipur(18), the cord is ated with boiled unstarched thread or a fine mboo string and cut by 'Wakthou'(knife e bamboo made implement). A recent ICMR rvey has found that in 47.6% deliveries the bilical cord was cut by an unsterilised cutting trument in rural births as against 23.8% of oan; thread is the commonest method of tying umbilical cord(6).

Dressing the cord and disposal of placenta

A variety of substances are traditionally plied on the cord. In a recent national minar(9) application of flamed and crushed tel leaves on the cord(in rural Java) where the rd dries up in just 48 hours, has been consided definitely superior to application of tibiotic powder on the cord, whereas applition of cowdung or ash has been considered rmful. In Maharashtra(7) majority of unained persons apply castor oil, turmeric, mkum ash, but trained TBAs have been found use sterile blade/ scissors and antiseptic essing. Abdominal binders after cord cutting and dressing are commonly used in West India for a variable period of 2-6 weeks(7,9) (even when the cord has fallen off) to prevent abdominal hernia. In Punjab, ghee(33%), ash and surma, antiseptics; all are used in cord care(35), In eastern UP catechu powder, betelnut, mustard oil, dry mud powder are also applied on the cut cord(30). In Central India, alongwith use of antibiotics, cowdung and dirty cloth have been found to be in use(36). Tribals usually do not dress the cord in Rajasthan(21). In addition, ashes from cowdung fires(31), mixture of lemon juice, rat dung(34) and saffron powder(32) have been reported to be in use in nineteen sixties and seventies. In a study on tetanus neonatorum, Bhakkoo et al(28) have pointed out that tetanus spores may settle down on ghee applied to the cord, or the ghee may cover the raw cord stump on which tetanus spores have already settled, thus making the environment anaerobic and favourable for growth of tetanus bacilli. Medicated 'til' oil is recommended for cord dressing by the ISM(11).

There are numerous traditional ways for disposal of the cut cord and placenta. In Turkey the umbilical cord is buried in the campus of a mosque in order to make the child confirm to religious traditions(39). Tribals of Madhya Pradesh bury the placenta at some suitable place(13). Rajasthan tribals bury the placenta deep in the ground, preferably in the house premises and put a big stone between the layers of mud so that dogs/cats may not eat the placenta and evil spirits may not affect it(29). In Manipur(18) the placenta is placed in an earthen pot and buried in the plinth edge either on the right or the left side of the room, depending upon the sex of the child; the umbilical stump is smoked by burning special leaves. In many parts of rural India, if the expulsion of placenta is delayed hairs are put in the throat of the mother or ash mixed with water is given to drink to induce vomiting and thereby increase the intra-abdominal pressure.

Similar practices have been observed elsewhere e.g. putting fingers in the throat, using snuff to induce sneezing, and so on (24).

(iv) Practices related to mouth cleaning, resuscitation : The ICMR multicentric study(6) has found that at birth, oropharynx of the infant is cleaned in 30% of urban and 66% of rural cases,gauze is used in 54% urban as compared to 8.3% of rural births and suction is used in 6% urban cases. Even in health functionaries the knowledge of oropharyngeal suction remains woefully inadequate till date(27). Unhygienic cleaning of the baby's mouth(and face) at birth is also done by birth attendants in Kasa(near Bombay) tribals(40). In Manipur a washed soft cloth is used for cleaning the mouth(18). In Maharashtra, asphyxia is treated by cleaning mouth/ pharynx, sprinkling hot/cold water(most common), inverting the baby upside down, patting on the back, making a loud noise with utensils(7,10). In rural Punjab early cutting of the cord by traditional birth attendants has been observed to cause asphyxia; if a child is born blue and lifeless the placenta is warmed up on an iron dish over burning cowdung cake so that life can travel to the child and the color may improve(41). In Vietnam the first cry of the baby is considered important and some believe that the baby should greet the world with a "cry", if the cry is delayed the midwife slaps the buttocks and/or blows into its nose. Folk belief indicates that the baby is born with a ball of mucus which if absorbed will lead to stuttering, asthma and idiocy. It is therefore emphasized that the midwife should clear the newborn's throat with her finger immediately after delivery. An additional rite to ensure normal speech ability in the child: one member of the family dips his finger in water with flower and incense and takes red silk on the finger and wipes the baby's mouth(42). In Philippines the baby's breathing is started by slapping its buttocks and holding it upside down(21). In Thailand the newborn is held with its face down and the midwife puts her finger into its mouth in order to extract mucus or blood, if the child does not cry even then, it is beaten hard enough on its bottom in order to make it cry. If it still does not cry the midwife waits for the afterbirth to emerge, then a red hot iron is pressed against the afterbirth. When the child feels the heat, it will cry. If this is not successful the baby is accepted not to survive (23). The ISM recommends that the moment the baby comes out of the maternal passage one should produce near the baby's ear sounds by striking stones and by splashing/ dashing cold and warm water on the child's face alternately to stimulate breathing. If these measures fail to revive, the child should be fanned with a reed-basket till the respiration is established. Mucus from the mouth and throat should be removed using sterile cotton with the help of the forefinger (11). Thus resuscitation procedures like ringing a bell and/or massaging the newborn are prevalent in tribal parts of Orissa(43).

POSTNATAL EVENTS

A variety of traditional practices for different aspects of neonatal care are encountered in literature.

(i) Practices related to provision of warmth and bath after birth : In Karnataka cleaning the child with lukewarm water has been considered a useful practice for clearing unwanted meconium and other 'infective' material(14). In tribal Madhya Pradesh cleaning of the child is done on the first and second day(13). In Manipur there is great emphasis on heating the room where delivery takes place near a wood charcoal fire. The baby is kept warm with the mother, but some tribals keep the baby in a well clothed basket till the 6th day, when the baby is given a special bath(18). In Maharashtra the newborn is bathed almost immediately after giving an oil massage so as to remove the vernix, and is then wrapped in an old cloth and kept near the mother(7). Immediate bath with warm water is

lso practiced in Uttar Pradesh(30) and in other arts of India(24,44). Cleansing with coconut oil nd bathing with lukewarm water is also racticed in Philippines, in some areas 'mother-oasting' (believed to be a purification of the nother and child) is encountered(21). In Thai-and the mother's lower garment is used to rotect the newborn against wind, and once the child has cried it is immediately wrapped in the cloth(23). The ISM literature mentions that the baby should be given a bath daily using medi-cated warm water, only the eyes and mouth are to be cleaned with water immediately after birth(11). Sindhi families traditionally tie their babies (45, 46) by a procedure akin to swad-dling. Wrapping the newborn in several layers of clothes is a tradition in many cultures, it should result in several layers of insulating air between the clothes and is an efficient method of preventing radiant, conductive, convective and evaporative heat loss. However, swaddling with more or less firm bands restricting spontaneous movements, impairing muscular heat production and increasing risk of aspiration syndrome, should be discouraged (47). Bathing of babies at birth is a dangerous practice and should be avoided. Bath should be postponed to the next day in summer and withheld for several days in winter; the baby should be gently cleaned of meconium and blood, no attempts should be made to remove the vernix from the skin(48).

(ii) Practices related to initial feed, prelacteal feeds and colostrum : Colostrum feeding appears to be more prevalent in tribal population than in others. Contrary to observations in Central India(49-51) colostrum is not discarded by tribals of Orissa(43), Gond mothers of Madhya Pradesh tribes (13,52) and by Toda mothers of Nilgiri tribes(53). About 53% tribal mothers in Uttar Pradesh have been found to be discarding colostrum, considering it to be a dirty liquid stored in the mothers body for nine months(44); thus they initiate breast feeding on 2-3 days of life(30,44). Ghutti, honey, water, diluted cow milk, herbal juice are also used as prelacteal feeds by tribals(43,44) usually alongwith colostrum. In tribals of Manipur honey is applied on the lips and tongue of the newborn, or liquid rice is given after finely chewing it, drops of wine are put, mouth-to-mouth or drop feeding is practiced(18). In rural Himachal Pradesh breast feeding is usually initiated within 6 hours of birth, colostrum is not thrown away and prelacteal feeds are not given(54). Prelacteal feeds(honey, jaggery, sugar or lactose in water, animal milk) are commonly given in Delhi(55); honey is given by the majority in Central India(56) and sugar water by 82% in South India(57). Thus there is a tendency to delay introduction of breast feeds to the second day or later(55,56). Honey has been reported as a common feed in Bangalore slums(58), Cow milk, sugar water, ghutti and honey-water have been identified as common feeds by the ICMR(59).In rural Maharashtra, the first feed is any combination of water, sugar, jaggery, honey and/or milk; it is offered any time from half hour to 12 hours after birth by a cotton ball sucked by the baby, soaked cloth, cup(wati) and spoon and/or bottle, and majority of the mothers discard colostrum. Colostrum is discarded because it is traditional to do so, it is stale and spoilt, difficult to digest or the baby's lips turn black on its administration(7,10). In Gujarat tribals do not discard colostrum, but urban and rural mothers usually do so for fear that it is unsafe, indigestible, and/or may cause diarrhoea, fever or other illnesses(60). In Punjab the choice of the first feed is honey, ghutti, water with sugar/salt, cow/goat or buffalo milk, and breast feeding is started on or after second/third day(35). A newborn may be put on water, cow's urine and sugar solution for first three days in the Chambal region of Central India. (22).

The practice of first giving a few drops of castor oil so as to cleanse the intestinal tract of meconium followed by honey has also been identified(24).

ISM literature recognizes colostrum as 'peeyusha' the thick, heavy, sticky, dense mothers milk which is secreted in small quantities in the first 3-4 days after delivery. It mentions that breast milk starts coming from third day onwards, thus on the first day ghee, honey with 'amantha' is to be given and on the second day the same with 'laxmana' is to be given, thereafter breast milk with or without butter can be given(11,19). It also recognizes that sucking by the baby is the most important stimulus for secretion(11).

The custom of administering prelacteal feeds deprives the neonate from benefits of colostrum, delays establishment of lactation in the mother, and there is a lurking danger of administering contaminated preparations through unhygienic procedures. It is most often a sleeping or crying child which receives such a feed and there is danger of this being aspirated into the respiratory passages(53).There is a practice of irrigating the conjunctival sac of the newborn by breast milk in some areas of Karnataka. This has been considered as a useful practice(14). It is relevant to mention here that though a lot of confusion exists in the timing of the first feed,[i] breast feeding is to be preferably started in the first hour of life, and [ii] the first feed should be breast milk, i.e. no water, honey etc are to be given - these are two of the 'ten commandments' for successful breast feeding(61). In a recent study, it has been found that honey is sterile, does not allow bacteria to grow in it, does not have antibacterial property in low concentrations, has a calorie value of 286 Kcal/ 200g, and mixed with other media it does not hamper bacterial growth(62).

(iii) Practices related to supplementary feeding nature of breast feeding. In tribals, usually supplementary feeding is not practiced till 6 months of age(13,22,30,44,60). In rural and urban communities supplementary feeds are usually not given in the newborn period (10,11,54-55). Supplementary feeds are given when breast milk is usually adjudged to be inadequate. No traditional practice could be identified in the literature which specifically calls for adding top milk to breast feeding in the newborn period. Demand feeding appears to be commonly practiced in India(22) many rural and tribal mothers breast feed 'whenever they get time(9,10,44).

(iv) Practices related to janam ghutti, gripe water and management of common ailments of newborns. 'Ghutti' has a big hold in treating sick newborns, and many indigenous pharmaceuticals manufacture it. Even household ghutti is made by mothers with varying ingredients and given with honey. The name is so popular that it is retained even in tribals for any medicine given orally to the child or with honey etc.(13). In rural Maharashtra 'Gripe water' is the most popular tonic given to babies to prevent irritability and flatulence; used ghutti containing various flavouring substances (nutmeg, soonth etc) is also prevalent(7). The ingredients of ghutti vary in different parts of India, and so do the indications. In Haryana weak tea with lemon, alcohol, 'janam ghutti', all are used for diarrhoea(63a). Eight out of the popular brands of grope water studied had 5% alcohol which may cause hypoglycenia (63b).

Opium is also used traditionally for diarrhoea(7,63). Herbal juices, long pepper preparations are administered by tribals and rurals for cough and cold, and chest massage with alcohol, mustard oil is also common(13,30) The newborn may be applied neem or turmeric paste for skin infections, asofoetida for pneumonia; saunf water may be given for vomiting or regurgitation, harad with lukewarm water for constipation(9). Removal of 'Nazar' is practiced for all serious ailments, especially for excessive crying in the newborn period(10). The composition of ghutti and the traditional practices for management of common neona-

l ailments are very diverse and cannot be laborated here for want of space. Most of them ppear to have origin from the ISM (use of herbs, eaves, bark, condiments, spices, flavouring ubstances) but have been abbreviated/distorted ver centuries in different cultures of India. Thus, for example,application of breast milk vith honey is recommended for eye diseases by SM(11). Application of milk from banyan tree s practiced for infected eyes and honey is applied or irritation in eyes in babies in eastern UP(30), rrigation of eyes with breast milk is practiced in Karnataka(14).

v) Practices related to kajal and surma pplication : Kajal(Kajjali) should not be con-used with Surma. Kajal is the more popular ticky eye cosmetic prepared from carbon soot nd is lead free. The word 'surma' is derived from he Sanskrit word 'Sauweeranjana'. 'Sauweera' vas the original name of Baluchistan where lead ulfide was mined and 'Anjana' means a fine dry medicament for conjunctival applica-ion(64). Charak(65) and Waagbhata in about 400AD(66) recommended that 'Sauweeranjana' .e. the fine powder of mineral lead sulfide should be regularly applied to the eyes for pre-serving vision. Surma use has persisted till today n the Northern Indian subcontinent for both nedical and mascara type cosmetic applications nd is likely to induce plumbism in some chil-dren(64). surma may also be applied along with sh on the cut cord in Punjab(35). Role of surma s indicated in high blood levels and plumbism ndirectly by studies from the UK(67,68) and India(64). Surma is quite popular in Muslims of Central India(36).

Freshly prepared Kajal is extensively used in West and Central India(7,10,13). It is put regu-larly in the eyes to clean them, make them bigger, improve eyesight, keeping them cool, to avoid 'Nazar', and for its decorative value(10) Kajal is also prevalent in tribals of UP, usually ghee is mixed with collyrium(30). In Central India Kajal is lamp-black and is smeared in the eyes of the baby to prevent 'evil eye'(36). We have not encountered any case controlled studies in litera-ture to incriminate the use of kajal in eye infections. Still it is not to be presumed that this practice cannot lead to eye infections, since we have observed that thorough hand washing does not precede kajal application and that the sticky substance is prone to attract spores, dirt and dust. In a recent national seminar on traditional practices it was recommended that application of kajal, howsoever well prepared it is, should be abandoned as it is a major source of eye ailments(trachoma in particular), as the applica-tion practices are not hygienic(9).

(vi) Practices related to 'Evil eye' and other superstitions. The 'evil eye', 'Nazar', 'bhoot-badha' is an extremely common tradi-tional belief incriminated in nearly all neonatal ailments, both prevention and treatment (jhar-phunk) of this hypothetical occurrence is prac-ticed widely in India. It may lead to gastrointes-tinal problems in Central India where it is pre-vented by amulets and treated by rubbing the baby's belly with salt, thereafter the salt is stoned with thorns and eventually burnt(36). Metal ornaments around neck or waist to ward off the evil eye in Maharashtra, and other elaborate rituals for removing the 'Nazar' are also practiced(10). Copper ornaments are believed to give strength, remove heat from the body and protect against diseases(7). The practice of tying talisman on the sick baby has been considered useful since it helps in detect-ing the approximate duration of illness(14). Superstitions are common in urban populations as well. They are related to ignorance, poverty and are influenced by religion, being more com-mon in Hindus and Muslims than in Chris-tians(69). Superstitions for prelacteal feedings have been found to account for 70-100% of new-borns receiving them in a peri-urban community, this was leading to unnecessary delays in lacta-tion(70). Most of the superstitious practices are

innocuous so far as their(direct) effect on progress of disease is concerned. However, their adoption hinders early scientific treatment, the medical treatment may be totally avoided leading to morbidity and rarely, even mortality (71).In Uttar Pradesh dough paste(lahi) and red chilies are burnt in the fire after encircling them around the young baby.

(vii) Practices related to massage of the baby: Oil application on the newborn is common before bathing. Oil massage is a universal practice, the type of oil is decided by the local availability and climatic conditions. These are considered useful practices as they give tissue protection and help in maintaining body temperature(9). In Central Indian tribals the shoemaker's lady (chamarin dai) conducts the massage with warm hands but without oil on the baby and the mother on the second day after delivery, subsequently the barber's lady (nain dai) massages the baby for a few more days(13). In rural Uttar Pradesh babies are massaged at least thrice a day with mustard oil as it is believed to strengthen the baby's muscles, helps in getting relaxed sleep and provides warmth to the baby. The massage is considered traditional and is done in a closed room before sunrise, at noon in sunlight and after dinner in front of a charcoal fire(44). In the Sonocolis community of Bombay, the mother and the baby are given massage and bath twice on the first day of delivery(72).In rural and urban Maharashtra massage of the anterior fontanelle(talu bharne) is very common, the ritual is done with special oils so as to help closure of the anterior fontanelle, prevent diarrhoea, for soothing the baby, and to improve brain circulation. Ritual of baby massage are done usually twice a day except when the baby is ill; a wide variety of oils(groundnut oil), coconut oil, til oil, mustard oil) are used for a variable period (upto 40 days to 1 year). The reasons for baby massage are nearly the same as elsewhere (improves circulation, is a form of exercise, protects skin, promotes sound sleep)(10). The practice of regular massage for the baby and the mother does not appear to exist in Rajasthan tribals(29). The tradition of baby massage is supported by the ISM(11).

Studies on oil application on preterms have shown beneficial results. The common oil application on preterms four times a day decreased the number of hours of radiant use significantly and also led to significant increase in the serum triglycerides(73).

In South India, instillation or blowing of small amounts of vegetable oil twice a week into the mouth or the nostrils of healthy young infants at the time of bath is a common tradition practiced by womenfolk with a view to 'clear and lubricate the nasal passage;'.This is accompanied with well recognized morbidity and mortality due to lipoid pneumonia (74,75). This traditional practice appears deep rooted, and despite the recognition of the problem and consequent health education(dissuading the mothers from such a practice) the problem persists even today(75).

(viii) Practices related to wet nursing : Wet nursing has reference in (appears to originate from) both in ISM and Western literature, In about 200 AD the fashionable Greek physician Soranus advised his upper-class lady patients not to put their infants to breast until 20 days of birth. During this time, according to Soranus, the mother was sick and the milk was thick, thus wet nurses became readily available (76a). It is relevant here to note that the children of the wet nurses might have got deprived of breast milk themselves. The ISM literature mentions that the nearest substitute for mother's breast milk is breast milk from another lady(19). It mentions that inadequacy of breast milk from the mother is to be suspected if the baby does not thrive well, is constipated, passes less urine, does not sleep at night and is not satisfied.

hese cases one should make an attempt to ease the breast milk supply of the mother, oloy a wet nurse, or start supplementary ds(11). Wet nursing is more commonly en-ntered in tribal populations of In-(13,44,60). Cultural implications may be ociated with surrogate breast feeding and uld be taken into consideration. The rogate mother may not produce enough milk; ally such a woman should have genuine affec-n for the child or a kinship obligation to care it, be healthy, and prove to be a successful tator.(76b).

) Practices related to immunization : In ecent national seminar on traditional practices was concluded that "resistance" to immuni-ion is harmful practice'(9). This "resis-nce" appears to be due to what caretakers of wborns in the community perceive as (a) the ed for immunization and (b) the contra-dications of the immunization. Illiteracy of rents and illness in the baby, albeit trivial, s been found to be a major reason for laying immunization(77,78). Tribals in cen-l India accept polio drops, but believe that ght' babies are not to be given injectible ccines (13). In rural areas, the mother-in-law/ andmother is the decision maker regarding the by's health, the same usually happens in the int/extended families of North India; this may so contribute to the "resistance" to immu-zation. It has been found in rural Punjab that though about 80% mothers have knowledge garding immunization, the immunization atus of their babies is complete only in proximately 20%(35). Thus, the resistance is robably due to the overall effect of norance, indifference and obstacles(rather an any specific TPNC) and therefore miti-ates the piecemeal approach of target -oriented mmunization programs(79).

x) Practices related to recording of birth eight : Tribal mothers in Central India are conscious of the weight of the newborn in terms of "lightness" or "heaviness"; if the child is heavy, weighing of the child is resented for fear of `evil eye' and therefore the mother and the baby have to be weighed together, then the mother has to be weighed alone(13). In a study of traditional perinatal care in rural Gujarat(80) the workers could not record the birth weight accurately in 11% newborns because the mother's refused to allow it for fear of `evil eye'.

We could not identify TPNC relevant to birth registration in the available literature.

(xi) Practices related to nose and ear pricking: Pricking the nose and ear for wearing ornaments, charms, talisman is common all over India, and is practiced almost universally on female children and quite often on male children too. Ear pricking is extensively practiced in male newborns in tribals and rural population of North, Central and West India. These practices have been considered harmless and it has been advocated that they may be continued so as not to hurt popular emotions associated with them(9). The ISM recommends that the ear pricking should be done after 6-8 months in a ceremony conducted by an ISM professional(Vaidya), the spot of puncture on the ear is also mentioned so that bleeding is slight and pain is minimal(19).

(xii) Practices related to wearing clothes, bedding, cradle, toys and others : After delivery, tribal women very soon set to work in the fields, therefore they carry their newborns tied to the shoulder in such a fashion that both hands of the mother are free, the child remains comfortable and can sleep and suckle well without disturbing the mother's work. Such close contact facilitates development of the child but may be responsible for transmission of some contagious diseases, e.g. yaws(13). In rural Uttar Pradesh, a separate bed is not prepared for the newborn, it sleeps on an ordinary bed with the mother(30). New clothes are put on newborns by

70-80% of mothers in North India.(30,44), old clothes are preferred in rural parts of Central and West India(7,10,13). The use of old, clean cotton clothes and avoiding synthetic clothes for newborns has been identified as a useful practice in Karnataka because synthetic materials can cause skin trauma(14). Cotton diapers made from old sarees and sheets are common(44). Cradles in rural Gujarat are usually fashioned by tying two ends of a strong cloth to firm supports wherever convenient, the newborn lies in the folds of cloth(81).

We could not find traditional practices specifically related to toys for the newborn in the literature. The classical approach in Ayurveda is that toys are introduced in the sixth month of life on an auspicious day in an elaborately described ceremony(11,82). A rite of showing the early morning sun and noon in the first month has been described; the naming ceremony is to be done on 10-12 days after birth(82).

(xiii) Practices related to postnatal care of mother : In Uttar Pradesh tribals body massage of the mother is a traditional practice of Guaka tribes as it is believed to help in recovery, Mothers are massaged for 11-30 days after delivery. They usually tie an old saree around the abdomen postnatally (as a binder) as it is supposed to add to the comfort and prevent bloating up of the abdomen. A bath is taken by them 1-3 days after delivery (44). The recovery period after delivery in farm labourers is extremely short due to economic constraints(30). In Maharashtra the baby and the mother are isolated in a dark room for 12-36 days so as to protect them from dirt, cold, wind and 'evil eye' (bhootbadha), the mother is given oil massage followed by a warm bath everyday and fumigation of her room(with ora, dhoop, shepa) is done(7,10). In Manipur this isolation is for 12 days during which the mother rests, uses abdominal and axillary binders and people are not allowed to touch her without changing their clothes(18). Body massage of the postnatal mother is the tradition in central India also, but the mother usually fasts on the first day following delivery(13). Limiting and restricting visitors to the newborn and the mother has been identified as a useful practice in Karnataka(14). The practices of isolation, use of binders, and body massage stem from the 'do's and don'ts' of Ayurveda(11,82).

(xiv) Practices related to lactation and lactagogues : Dietary support of lactation and use of lactagogues in the form of indigenous preparations is widely prevalent in India, emphasizing the deep rooted traditional support of breast feeding in the subcontinents. Garlic and ginger have been recognized as useful lactagogues(9). In Gujarat and adjoining parts of Central India, lactating women are given 'sheera', a special food made from cereals, jaggery/ sugar, ghee and milk(83). In these parts 80% of lactating women are given "Methipak" which is believed to increase lactation, involute the uterus, regulate menstruation, reduce bodyaches and impart strength to bones(84). Amongst tribal lactating women, special foods traditionally given are harara, rabdi, tuvar dal, suva-water, coconut and ghee(85). Rural and tribal women are also given methi laddoo, green gramdal and methipak to support lactation(86). Food taboos in lactation are also practiced out of fear that the child would be adversely affected through the breast milk if the mother consumed certain foods, e.g. "cold foods"(banana, curd, chilled milk, rice) are avoided so that the breast fed newborn would remain protected against 'colds'. Similarly 'gas producing ' foods like certain pulses and lady finger are avoided by the nursing mother lest the baby suffer from colicky pain, and green leafy vegetables are avoided by the mother for they may lead to diarrhoea and 'green stools' in the baby(22,60); these food taboos are known to cause nutritional deprivation in the nursing mother and may interfere with nutritional

ıcation programs(60). In farm laborers of Uttar desh, no special diet or rest is extended to the tating woman, the mother resumes work ckly after delivery and carries the child to the d, thus only 20% of nursing mothers have en found to consume arhar dal and cumin ds for increasing breast milk output(30).The ne references are used in the discussion of the ults of The National Survey of Traditional ıctices in Neonatal Care.

rural Maharashtra, a decoction of neem tree rk(Margosa), dried ginger, khuskhus, coconut, pper and garlic are the traditional lactagogues; xual activity is believed to hamper breast milk tput and abstinence is practiced 3-6 months er delivery(24). In Rajasthan gram flour and l are not given to lactating mothers as the wborn might suffer from abdominal pain and arrhoea(36). There are superstitious practices r promoting lactation as well; thus in Muslims central India the local medicine man sacrifices fowl to the deity, the blood is mixed with a little ater and sprinkled on the body of the nursing other. Or a cock is killed above the breast of woman who has inadequate lactation and the ood is allowed to drip on the breasts. Lacgogues vary in different communities in central dia, Hindus use dalia-milk, hariya, coconut, y fruits, honey, pulses and vegetable soup, hereas Muslims use eggs and abjobh. Different bstances are applied on the breast if breast milk to be suppressed - chilies, juice of neem aves, cow dung, wind plaster and catechu are ommon(36).

ribals in north India prohibit the mother to onsume rice, potato, banana, fish, jaggery, urad al and butter milk for 6 months after delivery. hese mothers are given fenugreek, ajwain, heat flour roasted in ghee and dry fruits to nhance lactation(44). The extremely varied ractices related to lactation and lactagogues riginate from the ISM which gives vivid details f the exact foods that are to be consumed or not to be consumed during lactation for many sets of days(first day, 2-5 days,5-10 days,10-36 days and so on)(11, 82).

Comments

The immense diversity of TPNC due to the webs of social, cultural and economic complexity in different regions in India cannot be overemphasized. The reviewers are aware of the fact that there are far, far more TPNC existent in the Indian subcontinent than highlighted above. A major limitation is the documentation of these practices in currently circulated scientific literature to which one can have ready access. Even from the well documented TPNC, we have been inclined to present those that appeared to have a direct or indirect relation to neonatal morbidity and mortality, and in this context our review is not without bias.

REFERENCES

1. Pitt D, Sterky G. Culture and Neonatal Technology; Values, Views and neonatal practices. In Sterky G, Tafari N, Tunell R(eds) SAREC report, Breathing and Warmth at Birth Judging the Appropriateness of Technology, Stockholm, R2: 1985 pp 13-16.

2. Sethi GR, Sachdev HPS, Puri RK. Women's Health and Outcome. Indian Pediatr. 1991, 28: 1379-1393.

3. Prakash A, Swain S, Seth S. Maternal mortality in India: Current status and strategies for reduction. Indian Pediatr 1991, 28: 1395-1400.

4. Sachdev HPS,Iyer PU, Bhargava SK. Secular trends in infant and perinatal mortality - Implication for child survival. Indian Pediatr 1991, 28: 1411-1418.

5. Ghosh S. Strategies for lowering perinatal

mortality. Indian Pediatr 1989,26: 1131-1132.

6. Bhargava SK, Singh KK, Saxena BN, ICMR Task Force National Collaborative study on identification of High Risk Families, Mothers and Outcome of their offsprings with particular reference to the problem of Maternal nutrition, Low Birth Weight, Perinatal and Infant Morbidity and Mortality in Rural and Urban slum communities: Summary, Conclusion and Recemmendations. Indian Pediatr 1991, 28: 1473-1480.

7. Natu M. Review of Traditional Practices in Mother and child care in Maharashtra. In: Reports of National Seminar on Traditional Practices in Mother and Child Care , National Institute of Public Co-operation and Child Development, New Delhi, 1989 pp-80-89.

8. Vani SN, Singh M(eds): Report and Recommendations of NNF Workshop on Human Resource Development for Neonatal Care in India, Ahmedabad, 1989 pp 9-10.

9. Report of National Seminar on Traditional (including Tribal) Practices in Mother and Child Care. National Institute of Public Cooperation and Child Development, New Delhi-1989.

10. Bhave S, Rao VN, A study of prevalent cultural practices of mother and child health. KEM Hospital, Pune 1980.

11. Mother and Child Care. An Evaluation of Lok Swasthya Parampara(First Draft). Lok Swasthya Parampara Samivardhan Samiti/ CHETNA, 1990.

12. Sheth J. Importance of Knowledge of nutrition among middle income group pregnant women of Baroda City. Thesis for Master of Science, Department of Food and Nutrition, MS University, Baroda-1988.

13. Saxena VB. Review of Traditional(Including Tribal) Practices in Mother and Child care in Madhya Pradesh. In : Report of National Seminar on Traditional Practices in mother and child care. National Institute of Public Co-operation and child Development, New Delhi, 1989, pp 22-41.

14. Meundi DB. Review of Traditional Practices in Mother and Child Care in Karnataka. In: Report of National Seminar on Traditional Practices in Mother and Child Care. National Institute of Public Co-operation and Child Development, New Delhi, 1989 pp 18-22.

15. Anuradha Some Issues in nutritional Discrimination against the female child. Report on National Workshop on the Girl Child. New Delhi, National Institute of Public Co-operation and Child Development, 1987, pp 61-69.

16. Chamberlain G, Garcia J. Pregnant women at work. Lancet 1987, 1: 228-230.

17. Murphy JF, Dauncey M, Newcombe R, Employment in pregnancy, prevalence, maternal characteristics and perinatal outcome. Lancet 1984, i: 1163-1166.

18. Singh KJ. Review of tradiotnal practices in mother and child care in Manipur. Report of National Seminar on Traditional practices in mother and child care, New Delhi. National Institute of Public Co-operation and Child Development 1989, pp 69-79.

19. Gangadharan CG. Prevalent Practices in Mother and Child care in India and its relation with indigenous health science. National Seminar on Traditional practices in Mother and Child Care, New Delhi, National Institute of Public Co-operation and Child Development, 1989 pp 90-99.

20. Giorgis BW. Seeking Appropriate Birth Technology. In Sterky G, Tafari N, Tunell R(eds)

SAREC report, Breathing and Warmth at Birth - judging the Appropriations of technology, Stockholm R2: 1985 pp 18-21.

1. Hart Doun V. From pregnancy through birth in a Bisayan Filipino village. In : Hart Doun V, Rajadhon PA, Coughun R (eds) South East Asian Birth Customs. Human Relations Area Files Press, 1965 pp 1-114.

22. Sethi NK. Traditional Practices of Marriage, Pregnancy and lactation. In: Report of National Seminar of Traditional Practices in Mother and Child care, New Delhi. National Institute of Public Co-operation and Child Development 1989, pp 151-157.

23. Rajadhon PA. Customs connected with birth and rearing of children. In: Hart DV, Rajadhan PA, Coughun RJ(eds) South East Asian Birth Customs. Human Relations Area Files Press 1965 pp 121-204.

24. Junnarkar AR. Tradional Practices in Rural Community:- A point for primary health care services. Report of National Seminar in Tradional Practices in Mother and Child Care, New Delhi, National Institute of Public Co-operation and Child Development, 1989 pp 158-170.

25. Mead M, Newton N. Cultural patterning in perinatal behaviour In: childbearing, Its Social and Psychological Aspects, Williams & Wilkins, Baltimore, 1967 p 169.

26. Ramji S. The Challenge of Perinatal Care in Urban Slums. Editorial, Bull NNF 1991, 5(2): 1-2.

27. Bhargava SK, Ranji S, Sachdev HPS. Current Status of Neonatal Care and Alternate Strategies for Reduction of Neonatal Mortality in the Decade of Nineties. Indian pediatr 1991, 28: 1429-1436.

28. Bhakkoo ON Garg SK, Agarwal KC, Gupta AN. Socio-epidermiological study of Neonatal Tetanus. Indian Pediatr 1976, 13: 545-552.

29. Mathur HN. Midwifery practices in a tribal community. Report of National Seminar or Tradional Practices in Mother and Child Care, New Delhi, National Institute of Public Co-operation and Child Development, 1989, pp 213-219.

30. Ahuja A. A study of child Rearing Practices among farm Labor Families of Pantanagar. Report of National Seminar on Traditional Practices in Mother and Child Care, New Delhi, National Institute of Public Co-operation and Child Development, 1989, pp 213-219.

31. Gordon JE, Gideon H, Wyon Jb. Child birth in Rural Punjab, Am J. Med Sci. 1964, 247: 344-348.

32. Majumdar H, Satwant Kaur. Neonatal Tetanus. Indian Pediatr, 1971, 8:145-148.

33. Friedlander FC. Tetanus Neonatorum. Report of eight cases with two recoveries. J. Pediatr 1951, 39: 448-449.

34. Schofield FD, Tucher VM, Westbrook GR. Neonatal Tetanus in New Guinea:Effect of active immunisation in pregnancy. Br. Med J 1961, 2:785-786.

35. Singh D. Attitudes of parents to child Health in Punjab In: Report of National Seminar on Traditional Practices in Mother and Child Care, New Delhi, National Institute of Public Co-operation and Child Development 1989 pp 114-130.

36. Tiwari SC. A Study of Child Bearing and Rearing practices in Hindu and Muslim communities in Urban and Rural Areas of Bhopal. In: Report of National Seminar onTraditional

Practices in Mother and Child Care, New Delhi, National Institute of Public Co-operation and Child Development 1989, pp 171-191.

37. Sound KK, Ram Chandran L, Mittal BS. Prevention and control of Tetanus in a Rural Community. Indian J Public Health 1967, 11: 38-40.

38. Gordon JE, Singh S, Wyon JB. Tetanus in villages of Punjab. An epidemiologic study. J Indian Med Assoc 1961, 37:157 - 159.

39. Can G. Neonatal Traditional Practice: A case report from Turkey. In: Sterky G, Tafari N, Tunell R(eds) Breathing and Warmth at Birth - judging the Appropriateness of Technology, Stockholm, 1985, pp 16-18.

40. Kolhatkar LM. A midwifery practice in a tribal block. Thesis for MD, Obstetrics & Gynecology, Grant Medical College, JJ Group of Hospitals/University, 1974.

41. Giden H. A baby is born in the Punjab. American Anthropologist 1962, 64: 1220-1234.

42. Coughin RJ. Pregnancy and birth in Vietnam. In Hart DV, Rajadhon PA, Coughin RJ(eds). South East Asian Birth Customs. Human Relations Area Files Press 1965 pp209-267.

43. Mohapatra SS, Baag RK. Customs and beliefs on neonatal care in a tribal community. Indian Pediatr 1982, 19: 675-678.

44. Pandey H, Punetha S. Traditional Mother and Child Care Practices of Bhutia tribe of District Pithorgarh(UP) - A pilot research study. In: Report of National Seminal on Traditional Practices in Mother and Child Care, New Delhi, National Institute of Public Co-operation and Child Development, 1989, pp 192-212.

45. Tomar BS. Superstitions and child health. Indian Pediatr 1980, 17: 883-885.

46. Shukla RS, Bhambhal SS, Bhandari NR. A study of superstitions and Practices on under five. Indian Pediatr 1979, 16: 503-505.

47. WHO. Appropriate Technology for Thermal Control of Newborn Babies - An update. MCH Unit, Division of Family Health, WHO, Geneva 1986, pp 2-3.

48. Daga SR. Warm Chain is the Key to newborn survival, Chronick - NNF 1991, 1(2): 1-3.

49. Bhandari NR, Patel GP. Dietary and Feeding habits of infants in various socio-economic groups. Indian Pediatr 1982, 19: 675-678.

50. Mathur YC. Impact of urbanization on feeding habits of infants in various socio-economic groups. Indian Peadiatr 1973, 10: 233-238.

51. Karan S, Rao M, Manorama. A study of customs and beliefs relating to mothers and infants in rural India. Current topics in Pediatrics 0507/04. XV International Congress Pediatr, New Delhi 1977.

52. Mudgal S, Rajput VJ, Chansoria M, Kaul KK. Tribals of Madhya Pradesh: A 'KAP' survey of infant feeding practices. Indian Pediatr 1979: 16: 617-622.

53. Balvady B, Pasricha S, Shankar K. Studies on lactation and dietary habits of Nilgiris Hill tribe. Quoted from Mudgal Set al 1979(48).

54. Bahl L, Singh L. Some aspects of infant rearing practices and beliefs in rural inhabitants of Himachal Pradesh. Indian Pediatr 1982, 19: 921-925.

55. Nalwa AS. Social factors operating in feeding practice and dietary pattern of Under-threes. Indian Pediatr 1981, 18: 453-457.

6. Arora D., Kaul KK. Feeding practices during the first five years among Central Indian Communities. Indian J Pediatr 1973, 40: 203 - 216.

7. Puri RK, Khanna KK, Ashok Kumar G, Prasad Rao DCV. Infant feeding and Child rearing methods in Pondicherry, South India. Indian J Pediatr 1975, 43: 323 - 332.

8. Prabhakara GN, Aswath PV, Shivaram C, Viswanath AN. Infant feeding patterns in slums of Bangalore. Indian Pediatr 1987, 24: 895-898.

9. Studies on Weaving and Supplementation Foods, ICMR Technical Report Series No. 27, 1974.

60. Gopaldas T. Review of Traditional Practices in Mother and Child Care in Gujarat. In: Report of National Seminar on Traditional Practices in Mother and Child Care, New Delhi, National Insitute of Public Co-operation and Child Development. 1989 pp 42-68.

61. Fernandez AR, Ghildiyal R, Mondkar J. Everything about Breast Feeding that Mothers Ought to Know. Chronicle - NNF 1991, 1(1): 1-5.

62. Sarangi G, Parida B. Utility of honey as a prelacteal feed. In: Lokeshwar Mr, Bhave SY(eds). Abstracts of Papers of the XXIX National Conference of the Indian Academy of Pediatrics, IAP Bombay, 1992(NEC/21) : p 34.

63a. Lal S. Traditional Practices in Diarrhoeal Diseases. In: Report of National Seminar on Traditional Practices in Mother and Child Care, New Delhi, National Insitute of Public Co-operation and Child Development, 1989 pp 100-113.

63b. Mokashi A. Consumer Alert / Dowe gripe water waters ? Academy Today. July 1990, pp. 6-7.

64. Gogte ST, Basu N, Sinclair S, Ghai OP, Bhide NK. Blood lead levels of children with Pica and Surma Use. Indian Pediatr 1991, 58: 513 -519.

65. Shree Gulab Kunwerba Ayurvedic Society(ed), Charak Samhita (about 1000 BC), Jamnagar 1949 : 72.

66. Garde GK(ed). Waagbhata's Ashtaangrhuydaya (about 400 AD), Pune 1956:7.

67. Singal GM, Gatrad AR, Howse PM et al. Blood lead, ethnic origin and lead exposure. Arch Dis Child 1988, 63: 973-975.

68. Attenburrow AA, Campbell S, Logan RW et al. Surma and blood lead levels in Asian children in Glasgon. Lancet 1980, 1:323.

69. Kushwaha KP, Mathur GP, Mathur S, Singh YD, Sati TR. Superstitious therapy during illness of pre-school children. Indian Pediatr 1986, 23: 163-168.

70 Kushwaha KP, Mathur GP. Study of Infant Feeding Practices in Non-ICDS periurban area of Gorakhpur (Personal Communication with Mathur GP). Quoted in Mathur GP, Kushwaha KP 1986.

71. Mathur GP, Kushwaha KP. Superstitions in Pediatric practice. (editorial) Indian Pediatr 1986, 23: 159-161.

72. Punekar VB. Son-Colis of Bombay. Punekar VB(ed), Popular Book Depot, Bombay 1959 pp 1-60.

73. Kulkarni M, Prabhu S, Chawla C. Oil Application in Preterm Babies - A source of Warmth

and Nutrition. Indian Pediatr 1986, 23: 790-791.

74. Balkrishan S. Lipoid pneumonia in infants and children in South India. Br Med J 1973, 4: 329-331.

75. Mahadevan S, Ananthakrishnan S, Srinivasan S. Lipoid pneumonia in South Indian Infants. Indian Pediatr 1991, 28: 1529-1530.

76. Helsing E, King FS. Breast Feeding in Practice - A Manual for Health Workers. Oxford University Press, New Delhi, 1984, a:42; b:228.

77. Vegas J, Chausaria M. Immunization in children: A study of temporal trends in a defined area. Indian Pediatr 1984, 21: 351-355.

78. Singh H, Kaur L, Kataria SP. Reasons for delayed vaccination. Indian Pediatr 1990, 27: 387-390.

79. Shah B, Sharma M, Vani SN. Knowledge, Attitute and Practice of Immunization in an Urban, Educated Population. Indian J. Pediatr 1991, 58: 691-695.

80. Mehta BP. Study of beliefs and practices regarding perinatal care and measurement of neonatal birth weight. Thesis for MD(Pediatrics), Department of Pediatrics, B.J.Medical College, Gujarat University, Ahmedabad, 1988.

81. Personal Communication with (1) Prof (Dr.) S.N. Vani, Head, Department of Pediatrics, Civil Hospital, B.J.Medical College, Ahmedabad; (ii) CHETNA, Ahmedabad; (iii) SEWA RURAL, Jaghadia.

82. Athavle VB. Bala Veda-Pediatrics and Ayerveda. Dr. VB Athavle (Publisher), Sion, Bombay 1977 pp 101-106.

83. Sheshadri S. Studies on nutrition health education in ICDS set up. Thesis for PhD, Department of Foods and Nutrition, MS University, Baroda 1987.

84. Mital N, Gopaldas T. Habit Survey of a culturally acceptable mother-food in Gujarat. Ecol Food Nutr 16(3): 242; Quoted in Gopaldas T, 1989 (Ref. 60).

85. Gopaldas T, Gupta A, Saxena K. Intrafamilial distribution of nutrients in a deep forest dwelling tribe of Gujarat, Indian. Ecol Food Nutr 1983, 13: 69-73.

86. Gujaral S. Meal Pattern, nutrient intake, intrafamilial distribution of foods, food habits and taboos. In: 'Household Resources and Their Changing Relationships; Case Studies from Gujarat, India. International agricultural Publications, General Series No. 3, University of Illinois, Ch-Urbana, USA, 1987, pp 35-37.

Section – IV

NATIONAL SURVEY OF TRADITIONAL PRACTICES IN NEONATAL CARE : 1990-1991

Co-Ordinator S. N. Vani

Discussnts Mahesh Sharma, Madhulika, S.K. Kabra,

/ESTIGATORS :

Chandigarh

ON Bhakoo, Professor of Neonatology, IMER, Chandigarh.

Delhi

Mcharban Singh, Professor & Head, Depart-nt of Pediatrics, AIIMS, New Delhi.

Sudarshan Kumari, Associate Professor of diatrics, Lady Hardinge Medical College, New lhi.

VK Paul, Associate Professor of Pediatrics, IMS, New Delhi.

AK Saili, Associate Professor of Pediatrics, dy Hardinge Medical College, New Delhi.

Gujarat

SN Vani, Professor & Head, Department of diatrics, B J. Medical College, Ahmedabad.

Mahesh Sharma, Assistant Professor of Pe-atrics, B. J. Medical College, Ahmedabad.

IETNA, Ahmedabad.

Sushil Kabra, Assistant Professor of Pedia-cs, KM School of Medicine & Research, hmedabad.

Madhulika, Pool Officer, Department of diatrics, B J.Medical College, Ahmedabad.

---

epartment of Pediatrics, Civil Hospital, J.Medical College, Ahmedabad.

Dr. Shobha Shah, Obstetrician, SEWA-RURAL, Jaghadia.

VD Jyotsna Raval, SRO,ICMR Project, B.J.Medical College, Ahmedabad.

Shri Harshwardhan Jani, Activity and Training Co-ordinator, NLRDF, Ahmedabad.

Dr. Salim Sheikh, Senior Resident, Department of Pediatrics, B.J.Medical College,Ahmedabad.

Dr. Sheila Ayer, Assistant Professor of Pedia-trics, Medical College, Baroda.

Dr. Uma Nayak, Assistant Professor of Pedia-trics, Medical College, Baroda.

4. Haryana

Dr. Sundar Lal, Professor & Head of SPM Department, Rohtak, Haryana.

5. Madhya Pradesh

Dr. KM Belapurkar, Reader in Pediatrics, G.R.Medical College, Gwalior.

Dr. Punam Kaushik, Senior Resident, Depart-ment of Pediatrics, G.R.Medical College, Gwal-ior.

6. Maharashtra

Dr. MS Rawat, Professor & Head, Department of Pediatrics, Government MedicalCollege, Nagpur.

Dr. Simin Irani, Professor of Neonatology, KEM Hospital, G.S. Sheth Medical College, Bombay.

7. Punjab

Dr. Manorama Verma, Professor & Head, Department of Pediatrics, Christian Medical

College, Ludhiana.

8. Rajasthan
Dr. RN Singh, Professor & Head of Pediatrics, Jodhpur Medical College, Jodhpur.

Dr. Rameshwar Sharma - Institute of Health Management - Jaipur.

Dr. SL Mandowara, Associate Professor of Pediatrics, Medical College Udaipur(Rajasthan).

Dr. Mukesh Gupta, Associate Professor of Pediatrics, S.N. Medical College, Jodhpur.

Dr. Jaymala Gupta, SRO, Institute of Health Management, Jaipur.

9. Tripura
Dr. Bikash Roy, Superintendent & Head, Department of Pediatrics, Indira Gandhi Children's Hospital, Agartala.

10. Uttar Pradesh
Dr. Prabha Tandon, Senior Research Officer, Obstetrics and Gynecology, K.G. Medical College, Lucknow.

11. West Bengal
Dr. Bijon Chakravorty, Ex. Professor of Pediatrics and Neonatology, Medical College, Calcutta.

Dr. MM Das, Professor ofPediatrics, Medical College, Calcutta.

AIMS AND OBJECTIVES

* To find out the extent of traditional practices in neonatal care.
* To find out the variability of TPNC amongst urban, rural and tribal population.
* To evaluate common TPNC relevant to neonatal morbidity and mortality from the current scientific literature available so as to group them into harmful, potentially harmful, innocuous and beneficial practices.

MATERIAL AND METHODS

An open ended prestructured and pretested proforma in English/ regional language were sent to various states for interrogating mothers who were 6-12 weeks postnatal. Mothers were randomly selected. Evaluation of antenatal, natal and postnatal beliefs and practices was done from the data thus collected.

In all cases the investigator was a i) senior medical officer, or ii) a resident or iii) a trained health worker under supervision of either i) or ii). After compiling all the proformas three broad groups were made. Analysis of data was done according to the percentage of responses obtained. Number of responders to any question was taken as 100% for calculation. For questions which had two or more responses, the answers were counted in all categories separately. In all 910 proformas from 11 states/UT were analysed using COBOL language and Lotus package software and divided into urban(537), rural(168) and tribal(205) population. The various beliefs and practices were subdivided into antenatal, natal and postnatal practices for making the analysis systematic.

Data Contributing Centers

1.	Chandigarh	15
2.	Delhi	42
3.	Gujarat	291
4.	Haryana	49
5.	Maharashtra	130
6.	Madhya Pradesh	52
7.	Punjab	30
8.	Rajasthan	136
9.	Tripura	25
10.	Uttar Pradesh	95
11.	West Bengal	45

Total Number of Respondents: 910

all 910 mothers were interviewed from differ- parts of India. 537(59.01%) were residing in an area, 168(18.46%) in rural and 205(22.52%) ribal area. The distribution of mothers ac- ding to the State is shown in Table 1. 77% of an, 78% of rural and 7% of tribal mothers were non-working. The educational status of respondents and their husbands is shown in Table 2 & 3. 41% of urban, 53% of rural and 44% of tribal mothers were having joint family. The remaining were having nuclear family.

Table 1 Distribution of mothers studied from various parts of India

ate	Urban	Rural	Tribal	Total
est Bengal	45	—	—	45
jasthan	69	56	11	136
ujarat	135	64	92	291
P.	60	35	—	95
aharashtra	58	11	61	130
aryana	31	02	16	49
adhya Pradesh	52	00	00	52
elhi	42	—	—	42
gartala	—	—	25	25
njab	45	—	—	45
otal	537(59.01)	168(18.46)	205(22.52)	910

Table 2 Respondent's education (x=910)

ducation	Urban(%)	Rural(%)	Tribal(%)	Total(%)
literate	192(35.75)	113(67.27)	86(41.95)	391(42.96)
rimary	105(19.57)	28(16.66)	45(21.95)	178(19.56)
Middle	62(11.54)	13(07.73)	40(19.51)	115(12.63)
econdary	77(14.35)	10(05.95)	20(09.75)	107(11.75)
Higher Secondary	28(05.22)	04(02.38)	04(01.95)	36(03.95)
Graduate	40(07.43)	—	10(04.87)	50(05.49)
Postgraduate	33(06.14)	—	—	33(03.62)
Total	537	168	205	910

Table 3 Husband's education

Education	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Illiterate	129(30.35)	76(51.70)	48(25.39)	253(33.33)
Primary	54(12.70)	24(16.32)	36(19.94)	114(14.98)
Middle	55(12.94)	13(08.84)	32(16.93)	100(13.14)
Secondary	75(17.64)	13(08.84)	46(24.33)	134(17.60)
Higher Secondary	39(09.17)	21(14.28)	10(05.29)	70(09.19)
Graduate	43(10.11)	—	14(07.40)	57(07.49)
Postgraduate	30(07.05)	—	03(01.58)	33(04.33)
Total	425	147	189	761

Remaining(910-761) = non responders.

ANTENATAL EVENTS

i) Minimal Antenatal care

Minimal ANC(2 visits) was received by 298(32.74%) mothers. The minimal ANC in urban group was 41.15%, in rural and tribal areas it was 17.26% and 23.41% respectively. [Of all the respondents, 80% sought antenatal advice in some form or the other i.e.'non formal antenatal consultations' from elderly women in the family(88%), visitors and other relatives(8%) and neighbours(4%). Thus, approximately 87% of the urban mothers got antenatal advice while same was 70% and 74% for rural and tribal mothers respectively]. Common reasons for seeking antenatal care were elders advise, "on their own" or motivation by workers (Table 4). The various reasons given for not taking antenatal care included ignorance, personal problems (Loss of daily wages, center faraway, lack of time etc). Non availability was not a significant problem. Ignorance was a major problem in rural areas (Table 5) who offered ANC, was not answered by all but in majority it was offered by doctors in all groups. Dais or paramedical workers contributed only 18% (Table 6). Almost 52% of mothers knew the date of their last menstural period and in 51% of them were able to calculate their expected date of delivery in urban areas, while in rural and tribal areas it was 32% & 22% respectively.

Table 4 Motivation for Antenatal Care (ANC)

Reasons	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Motivated by Workers	80(26.14)	10(12.65)	20(28.57)	110(24.17)
Advised by elders	107(34.96)	41(51.89)	18(25.71)	166(36.48)
"On their own"	112(36.60)	18(22.78)	18(25.71)	148(32.52)
Others	07(02.28)	10(12.65)	14(20.00)	31(06.81)
Total	306	79	70	455

Others : Friends, Relatives and Neighbours

Table 5 Various Causes For Not Taking Antental Care

Cause	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Ignorant	77(34.68)	64(73.56)	28(22.58)	169(39.03)
Not available	27(12.16)	—	21(16.94)	48(11.09)
Difficult to receive	56(25.23)	07(08.05)	40(32.26)	103(23.79)
Others	62(27.93)	16(18.39)	35(28.23)	113(26.10)
Total	222	87	124	433

Others

(i) Home delivery is customary.
(ii) Not enough family caretakers.
(iii) Pregnancy taken as a normal event, hence ANC not considered.
Remaining (910-433) : Non responders.

Table 6 Personnel offering Antenatal care

Personnel	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Trained Dai	27(11.11)	—	05(09.62)	32(09.78)
Untrained Dai	08(03.29)	15(46.87)	05(09.62)	28(08.56)
Paramedical	13(05.34)	—	—	13(03.97)
Doctor	195(80.24)	17(53.12)	42(80.77)	254(77.67)
Total	243	32	52	327

ii) Problems during pregnancy

Almost half of the mothers had some problem during pregnancy. The problems included vomiting (44%), Heartburn(15%), fever(11%), constipation(10%), abdominal pain(8%) and vaginal bleeding(5%). There was no difference in the incidence of these problems amongst urban, rural or tribal population. 36% of urban, 28% tribal and 10% of rural mothers were aware of serious problem during pregnancy (high risk concept). Majority wanted to consult doctors or elders for advice regarding problems during pregnancy (Table 7).

Table 7 Persons from whom advice was taken for problems during pregnancy

Personnel	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Doctor	290(89.51)	30(40.54)	50(41.32)	370(71.29)
Dai	03(00.93)	11(14.86)	12(09.92)	26(05.01)
Elders	22(06.79)	11(14.86)	35(28.93)	68(13.10)
Paramedical	06(01.85)	—	02((01.65)	08(01.54)
On their own	03(00.93)	22(29.73)	14(11.57)	39(07.51)
Others	—	—	08(06.61)	08(01.54)
Total	324	74	121	519

Others Senior relatives/friends/responsible visitors.

iii) Dietary changes

80% urban, 58% tribal and 70% of rural mothers made some changes in their diet. The dietary changes in urban and tribal regions included increased amount of milk and milk products but no specific pattern was observed in rural mothers. (Table 8).

Most of the mothers changed their diet either on their own or on advice of doctors or elders. Paramedical workers and dais did not play a significant role in dietary advice (Table no. 9). 33% mothers from tribal area, 22% from urban area and 15% of rural areas were restricting some food items from their diet during pregnancy on advice of elders, for easy labour, fear of abortion etc. The restricted food items included vegetables and fruits, milk and milk products, cereals, pulses, sourfood and non vegetarian diets. (Table 10).

Table-8 Additional food items during pregnancy

Dietary Charge	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Milk and ghee	141(45.63)	20(18.87)	19(33.93)	180(38.22)
Cereals and pulses	15(04.85)	—-	05(08.93)	20(04.25)
Vegetable and fruits	42(13.59)	10(09.43)	11(19.64)	63(13.38)
Oil and ghee	—-	40(37.74)	04(07.14)	64(13.59)
Sour foods	20(06.47)	—-	04(07.14)	04(00.85)
Non veg. food	51(16.50)	——	05(08.93)	56(11.89)
Others	40(12.94)	36(33.96)	08(14.29)	84(17.83)
Total	309	106	56	471

Others included
Sheera, Baroda mix, enriched ladoos, dry fruits, coconut and mishri.

Table 9 Persons who advised addition of food in diet during pregnancy.

Personnel	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Doctor	184(42.69)	15(12.71)	36(30.00)	235(35.13)
Dai	15(03.48)	——	—	15(02.24)
Elders	106(24.59)	48(40.68)	18(15.00)	172(25.71)
Paramedical	22(05.10)	15(12.71)	15(12.50)	52(07.77)
On their own	93(21.58)	30(25.42)	51(42.50)	174(26.01)
Others	11(02.55)	10(08.47)	—	21(03.14)
Total	431	118	120	669

Others
Senior relative/Bhagat/Friends/Visitors in the Family.

Table-10 Restricted food items during pregnancy

ood Item	Urban (%)	Rural (%)	Tribal (%)	Total (%)
ilk and ghee	15(09.43)	33(30.28)	19(27.14)	67(19.82)
ereals and ulses	15(09.43)	—	05(07.14)	20(05.92)
egetable and uits	79(49.69)	33(30.28)	26(37.14)	138(40.83)
l and ghee	17(10.69)	—	05(07.14)	22(06.51)
our foods	15(09.43)	33(30.28)	03(04.29)	51(15.09)
on veg.	—	—	07(10.00)	07(02.07)
thers	18(11.32)	10(09.17)	05(07.14)	33(09.76)
otal	159	109	70	338

thers included Rice, brinjal, garlic and onion, tuar dal, guava, papaya, potato, lady finger, curd, fish, adi, roti, green leafy vegetables, ghee, spices, salt, pulses, bananna and jaggery.

v) Traditional methods to protect pregnancy nd for easy labour

More than 70% (73% urban, 70% of rural and 2% rural) of mothers were following one or more traditional measures for protection of pregnancy. These include -not going out in eclipse, praying or fasting, keeping the knife under pillow avoiding sexual intercourse, not going outdoor after dusk, tying ganda or tabiz etc. (Table 11). Most of the mothers felt that these measures should be continued. Many mothers were following certain practices for easy labour in terms of oil ingestion, food and water restriction, exercise etc. (Table 12).

Table 11 Traditional methods of protecting pregnancy

Method/Practice	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Knife under Pillow	114(14.73)	49(23.00)	58(19.53)	221(17.21)
Not going outdoor after dusk	122(15.76)	28(13.15)	30(10.10)	180(14.02)
Not going out n eclipse	192(24.81)	35(16.43)	70(23.57)	297(23.13)
Avoiding sexual intercourse during pregnancy	99(12.79)	28(13.15)	42(14.14)	169(13.16)
Ganda and Tabiz	72(09.30)	34(15.96)	29(09.76)	135(10.51)
Praying or fasting	159(20.54)	31(14.55)	50(16.84)	240(18.69)
Others	16(02.27)	08(03.76)	18(06.06	42(03.27)
Total	774	213	297	1284

Others 'Khola Bharna, not tying cow's legs, not to go under banyan or tamarind tree, not to sleep on a couch, not to look at a widow or mothers with bad obstetric history or infertile complex.

Table 12 Practices for easy labour

	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Food restr.	82(21.30)	89(64.49)	37(29.37)	208(32.05)
Water rest.	41(10.65)	07(05.07)	29(23.02)	77(11.86)
Castor oil	169(43.90)	35(25.36)	29(23.02)	233(35.90)
Medicines	50(12.99)	07(05.07)	29(15.08)	76(11.71)
Dietary changes	20(05.19)	—	04(03.17)	24(03.70)
Exercise	23(05.97)	—	08(06.35)	31(04.78)
Total	385	138	126	649

ISM remedies :- Saunf, ajwain, cloves, Kesar milk.

v) Baby's sex prediction

27% urban mothers, 20% tribal and 6% rural mothers knew some symptoms for prediction of the sex of the baby and same number of mothers knew some ritual for having a male baby.

vi) TPNC for physical characters of baby

Many mothers were following some rituals or practices for fair color and good hair of baby in all the areas (urban 18%, tribal 10% and rural 10%). Many mothers wanted good weight baby and 25 % urban, 20% tribal and 5% rural mothers followed one or the other practice for a good weight baby. These practices varied from place to place even in the same state and consisted of intake of specific food items (coconut, cream etc) during pregnancy.

vii) Advance preparation for delivery :-

The place for conducting delivery was fixed in 87%, 71% and 62% of urban, rural and tribal mothers in advance and the person who would be conducting delivery was fixed in 65%, 63% and 49% of urban, rural and tribal population respectively. In all areas preparation of place and other items was made in advance by 50 to 60% of respondents.

NATAL EVENTS

i) Delivery

Delivery was conducted in hospital setup in 54% of respondents. In urban area majority delivered in hospital while in rural area most of the mothers delivered at home. In tribal area equal number of deliveries were conducted at home or hospital (Table 13).

The major reasons for conducting delivery at home was problem of transport. The other reasons included social custom, non availability of family members or medical services etc. (Table 14). The deliveries were conducted by doctors, trained dais, elderly ladies, untrained dais, paramedical workers of mothers themselves. The incidence of untrained persons conducting delivery was nearly equal in all area (Table 15).

Table 13 Place of delivery

ace	Urban (%)	Rural (%)	Tribal (%)	Total (%)
ome	164(32.67)	134(91.16)	86(47.25)	384(46.21)
ospital	338(67.33)	13(08.84)	96(52.75)	447(53.79)
otal	502	147	182	831

ospital + PHC + Subcenter.

Table 14 Reasons for home delivery

easons	Urban (%)	Rural (%)	Tribal (%)	Total (%)
ustom	47(20.80)	73(49.32)	22(15.60)	142(27.57)
ransport roblem	115(50.88)	39(26.35)	71(50.35)	225(43.69)
Non availability f services	22(09.73)	13(08.78)	18(12.77)	53(10.29)
Non availability f family members	38(16.81)	23(15.54)	27(15.15)	88(17.09)
Others	04(01.77)	—	03(02.13)	07(01.36)
Total	226	148	515	

Others monetary problems/ emergency delivery/ fear of operation/ fear of mother getting cold/ fear of being left alone in labor room/ fear of psychosis (post-partum).

Table 15 Persons conducting home delivery

Personnel	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Elderly lady	49(29.88)	41(32.54)	17(19.77)	107(28.46)
Untrained Dai	38(23.17)	30(23.81)	30(34.88)	98(26.06)
Trained Dai	50(30.49)	35(27.78)	35(40.70)	120(31.91)
Paramedical	27(16.46)	13(10.32)	03(03.49)	43(11.44)
Others	--	07(05.56)	01(01.16)	08(02.13)
Total	164	126	86	376

Others self/ eldest daughter/ husband/ co-traveller.

ii) Aseptic precautions during delivery

Prior cleaning of rooms were done in 41% deliveries and was slightly more commonly done in rural and tribal areas. Hand washing by the person conducting delivery and perineal cleaning was done in 29% and 30% respectively. (Table 16). Practices of pervaginal examina-

tion, enema to the mother before delivery and use of gloves were encountered in 33%, 27% and 33% respectively . These were more common in urban areas.

Table 16 Asepsis during home delivery

Practices	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Prior cleaning of room	91(36.55)	96(45.07)	63(42.86)	250(41.05)
Hand washing before conducting delivery.	88(35.340)	50(23.47)	36(24.49)	174(28.57)
Cleaning of perineum	70(28.11)	67(31.46)	48(32.65)	185(30.38)
Total	249	213	147	609

POSTNATAL EVENTS

NEWBORN CARE

i) Cord care

Almost 40% of the respondents used newblade for cutting the cord. The other articles used for this purpose were scissors and knife in urban area, knife and old blades in rural and tribal areas (Table 17). Cord was cut before delivery of placenta in 92% of babies in tribal area. Majority in all the areas were tying the cord with thread. The other articles used for tying cord included rubber, elastic, chaddinara etc. (Table 18).

In rural area majority of mothers applied ghee over cord while in urban and tribal regions the substances applied over cord were variable and included GV paint, kumkum,medicine,cowdung ash etc. (Table 19). Majority of mothers did not do any specific measure to hasten the shedding of cord. The cord was disposed off by burying under earth by majority of rural mothers while some of the tribal and urban mothers were preserving it for making tabiz, medicines etc. (Table 20).

Table 17 Articles used for cutting cord

Articles	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Newblade	137(35.31)	69(53.08)	65(41.67)	271(40.21)
Old blade	13(03.35)	10(07.69)	12(07.69)	35(05.19)
Knife	86(22.16)	20(15.38)	29(18.59)	135(20.03)
Scissors	148(38.14)	20(15.38)	46(29.49)	214(31.75)
Sickle	04(01.03)	—	02(01.28)	06(00.89)
Others	00	11(08.46)	02(01.28)	13(01.93)
Total	388	130	156	674

Others Crushed with stone/ bamboo spike/ ripped apart.

Table 18 Articles used for tying the cord

rticles	Urban (%)	Rural (%)	Tribal (%)	Total (%)
hread	302(75.69)	115(77.70)	98(65.77)	515(73.99)
bber	57(14.29)	06(04.05)	21(14.09)	84(12.07)
lastic	37(09.27)	15(10.14)	09(06.04)	61(08.74)
ot tied	—	06(04.05)	16(10.74)	22(03.16)
thers	03(00.75)	06(04.05)	05(03.36)	14(02.01)
otal	399	148	149	696

thers Chaddi nada, knotted over itself, braid ribbon cord clamps, copper wire and plastic wire.

Table 19 Substances used for cord dressing

ubstances	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Gentian violet	183(40.94)	20(13.99)	46(31.08)	249(33.74)
Ash	04(00.89)	07(04.90)	03(02.03)	14(01.90)
Ghee	111(24.83)	85(59.44)	27(18.24)	223(30.22)
Kumkum	37(08.28)	14(09.79)	23(15.54)	74(10.03)
Cow dung ash	08(01.79)	05(03.50)	16(10.81)	29(03.93)
Medicinal powder	55(12.30)	06(04.20)	27(18.24)	88(11.92)
Others	49(10.96)	06(04.20)	06(04.05)	61(08.27)
Total	447	143	148	738

Others Turmeric+ghee/Raksha potli/ talc/warm oil/mustard oil/ surma+ash/ gauze spirit dressing/ mud powder/ variable ingredients with oil.

Table 20 Disposal of shedded cord

Practice	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Discarded	171(35.04)	29(17.79)	53(29.44)	253(30.45)
Preserved	177(36.27)	21(12.88)	80(44.44)	278(33.45)
Buried	130(26.64)	113(69.33)	45(25.00)	288(34.66)
Not known	10(02.05)	-	02(01.11)	12(01.44)
Total	488	163	180	831

ii) Resuscitation

If baby did not cry the measures taken were slapping, flicking immersion in hot cold water, mouth to mouth respiration etc. (Table 21).

Table 21 Measures taken if child does not cry immediately

Practice	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Slapping	273(51.61)	91(53.53)	107(59.44)	471(53.58)
Flicking	61(11.53)	35(20.59)	13(07.22)	109(12.40)
Immersion in hot water Immersion	101(19.09)	13(07.65)	25(13.89)	139(15.81)
in cold water	55(10.40)	06(03.53)	18(10.00)	79(08.99)
Mouth to mouth respiration	29(05.48)	25(14.71)	13(07.22)	67(07.62)
Others	10(01.89)	—	04(02.22)	14(01.59)
Total	529	170	180	879

Others handing upside down/blowing air in mouth/cleaning oral cavity/ squeezing the cord/ crushing of placenta/ inserting finger dep in mouth/ tight wrapping/ making a din with a stone and thali/ heating the placenta/ 'smoking' the baby.

iii) Baby bath

Almost all the newborns in rural area and 64% of tribal area were given first bath immediately after birth, while 55% of them in urban babies. Subsequently 78% mothers were giving bath to their babies.

iv) Warming practices

Various practices for keeping the babies warm were used by 93% of mothers equally in all areas and these included - closing of doors and windows of the room, covering baby loosely in clothes, tight wrapping and heating the room etc.

v) Kajal application

Application of kajal to newborn was almost universal(98%) in rural area while 84% of mothers in urban and 80% from tribal population applied Kajal to their babies. Approximately half of the mothers (urban 63%, rural 36%, tribal 47%) were using home made kajal. The reasons for kajal application were beautiful eyes, elders advice, tradita, protects from evil eye etc. (Table 22). Surma application was not encountered in our survey.

Table 22 Reasons for kajal application

Practice	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Elder's advice	148(25.04)	102(48.11)	34(16.92)	284(28.29)
For beautiful eyes	301(50.93)	67(31.60)	137(68.16)	505(50.30)
Tradition	135(22.84)	37(17.45)	22(10.95)	194(19.32)
Others	07(01.18)	06(02.83)	08(03.98)	21(02.09)
Total	591	212	201	1004

Others Cleanse the eye/ preventing 'evil eye'/ preventing eye disease/ to improve acuity of vision/ for longevity.

Massage

l massage was given to almost all the new-rns(96%) in rural areas and 76% of urban and 67% of tribal mothers were giving message to their babies. The reason for it were custom, elderly advice, own their own etc. (Table 23).

Table 23 Reasons for giving massage to the baby

actice	Urban (%)	Rural (%)	Tribal (%)	Total (%)
ustom	138(38.98)	71(50.35)	51(46.36)	260(42.98)
der's advice	208(58.76)	63(44.68)	56(50.91)	327(54.05)
thers	08(02.26)	07(04.96)	03(02.73)	18(02.98)
otal	354	141	88	605

thers Improving circulation/ better skin care/ good sleep/ baby enjoys it/ improving muscle rength/ keeps baby warm/ prevents diseases of limbs/ better development/ for long, sturdy life/ prents skin diseases.

ii) Feeding of newborn

n urban areas 77% of mothers gave first feed vithin 6 hours of life while it was delayed beyond hours in tribal areas by significant number of nothers (Table 24). The reasons given for deayed feeding were either custom or belief that aby may not be able to suck. Most of the mothrs gave first feed when baby cried, some lecided about time of first feed according to raditions and few gave after some ceremony Table 25). Prelacteal feeds were given by majority in all the areas and the substances included - jaggery, sugar, honeywater, janamghutti, milk etc. The amount of prelacteal feeds varied from few drops to few spoons and the frequency of feeding depended onacceptability of the infant (Table 26).

Colostrum was discarded by 39% urban, 76% rural and 45% tribal mothers. Majority of tribal mothers discarded colostrum because they thought it is harmful for the baby (Table 27). The other causes for discarding colostrum were traditional practice, considered dirty, harmful or unnecessary for baby etc.

Table 24 Time of first feeding

Time	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Within 6 hours	265(77.26)	89(74.79)	34(38.64)	388(70.29)
6-24 hours	73(21.28)	20(16.81)	49(55.58)	142(25.72)
24-48 hours	05(01.46)	10(08.40)	03(03.41)	20(03.62)
> 48 hours	—	—	02(02.27)	02(00.36)
Total	343	119	88	552

Table 25 Causes and beliefs for delayed (beyond 12 hours) starting of breast feeding

Causes/Belief	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Baby not able to suck	105(37.50)	11(17.74)	57(44.53)	173(36.81)
Custom	94(33.57)	35(56.45)	30(23.44)	159(33.83)
Non milk feeds given	35(12.50)	05(08.06)	24(18.75)	64(13.62)
Others	46(16.43)	11(17.74)	17(13.28)	74(15.74)
Total	280	62	128	470

Others Elder's advice/ mother not able to feed/ milk in sufficient/ Initial milk not good for baby/ day of 1st breast feed ritually fixed by astronomy/ waiting for family senior to give customary pre-lacteal feed/waiting for moonrise or star rise.

Table 26 Nature of first feed given to the baby after birth

Nature of feed	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Jaggery water	57(17.17)	59(51.30)	17(21.79)	133(25.33)
Sugar water	57(17.17)	13(11.30)	19(12.82)	80(15.24)
Ghee+Honey+sugar	77(23.19)	36(31.30)	37(47.44)	150(28.57)
Janam gutti	-	-	03(03.85)	03(00.57)
Breast Milk	40(12.05)	—	08(10.26)	48(09.14)
Top milk	87(26.20)	07(06.09)	03(03.85)	97(18.48)
Others	14(04.22)	-	-	14(02.67)
Total	332	115	78	525

Others batasha pani/ glucose water/ water/ ghee/honey/ghee+honey/ Castor oil to the meconium baby.

Table 27 Reasons for discarding colostrum

Reasons	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Harmful	213(64.74)	53(38.97)	99(62.66)	365(58.59)
Dirty	52(15.81)	55(40.44)	34(21.52)	141(22.63)
Traditional custom	52(15.81)	25(18.38)	17(10.76)	94(15.09)
Others	12(03.65)	03(02.21)	08(05.06)	23(03.69)
Total	329	136	158	623

Others Contains germs/ causes abdominal upset/ unnecessary/ can lead to various illnesses because it is stored for 9 months.

e breasts were cleaned before starting eding by 87% mothers in all areas and baby's ere fed on demand by 80% mothers.

% mothers continued breast feeding during ness in all the areas but 60% mothers from ral and tribal areas believed that there is some crease or change in quality of milk during illness.

Supplementary feeding was given by 40% mothers equally in all the areas and the reasons given was insufficient milk by 80% mothers. The supplementary feeds included animal milk or dairy milk (Without dilution with bottle or spoon by equal number of mothers. (Table 28 and 29).

Table 28 Type of milk used for supplementary feeding

ype of milk	Urban (%)	Rural (%)	Tribal (%)	Total (%)
ow	103(47.03)	27(49.09)	16(32.00)	121(46.01)
uffalo	74(33.79)	18(32.73)	20(40.00)	94(35.74)
oat	05(02.28)	10(18.18)	08(16.00)	15(05.70)
airy	34(15.53)	—	04(08.00)	28(10.65)
thers	08(01.37)	—	02(04.00)	05(01.90)
otal	219	55	50	263

thers Donkey milk, Camel milk, powder milk.

Table 29 Methods used for supplementary milk/feeds

Methods	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Bottle	103(58.19)	34(60.71)	14(43.75)	151(56.98)
Cup & spoon	48(27.12)	20(35.71)	16(50.00)	84(31.70)
Others	26(14.69)	02(03.57)	02(06.25)	30(11.32)
Total	177	56	32	265

Others Paladi, cotton wick, soaked cloth, finger dripping, folded banyan leaf, wooden spoon, oaked vessel, small gangasagar dropper.

viii) Treatment of common ailments in newborn

70-80% mothers from all areas prefered medicines for common ailments like jaundice, constipation, excessive crying, vomiting,cough ,fever, abdominal distension, pyoderma and regurgitation of feeds. The remaining preferred to use traditional practices like mala,Jhad-Phunk,tabiz,brandy, ghasa etc. to a variable extent. For jaundice mala, Jhad-Phunk, Jaiphal, Janamghutti, tabiz were more preferred while for constipation: castor oil,application of Heeng over, abdomen, ghasa, Janamghutti, 'Nazar Utarana' were more prevalent.For excessive crying'Nazar Utarana' Jhad-Phunk, opium, turmeric and feeding of top milk were common practices. For vomiting Jaiphal, mala, mantra, Janamghutti,

Nazar Utarana', suva water, tabiz were common remedies in use. For abdominal distension - application of heeng over abdomen, castor oil, ghasa, Janamghutti and for regurgitation of feeds harde, Janamghuttis were commonly used household treatment. For pyoderma, practices prevalent were neem bath, milk cream, application of pigeon's excreta over the wound.

xi) Miscellaneous

Evil eye (Nazar- Dhrishti)

Most of the mothers believed in evil eye and the prevention of its effect. various practices were prevalent in all the areas which included black teeka (47%), wrist band of black and white beads, tabiz, kandora etc.(Table 30)

Table 30 Practices prevalent to protect babies from Evil eye

Practice	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Tabiz	87(14.62)	35(18.32)	31(12.55)	153(14.81)
Kandora	46(07.73)	32(16.75)	18(07.29)	96(09.29)
Wrist Band	172(28.91)	51(26.70)	67(27.13)	290(28.07)
Black and white beads Black teeka	276(46.39)	73(38.22)	127(51.42)	476(46.08)
Others	14(02.35) -	04(01.62)	18(01.74)	
Total	595	191	247	1033

Others Black thread in neck/ black clothes/ Jhar-Funk/ burning chilies after encircling over head/ burning dust from foot prints of suspected person/ coconut practices/ oil lamp at cross roads.

Cradle, clothes, toys

71% urban, 41% rural and 59% tribal mothers preferred old clothes for their newborns. More than 80% mothers from all areas did not have any preference for toys 27% of urban and rural mothers 17% of tribal expressed preference for cradles.

Isolation of mother after delivery

64% of urban and rural mothers and 79% tribal mothers were isolated within the household and the various reasons given were - prevention of infection, ritual, tradition and custom etc.(Table 31).

Table 31 Reasons for the isolation of mother after delivery

Practice	Urban (%)	Rural (%)	Tribal (%)	Total (%)
To prevent	133(53.41)	11(14.10)	21(34.43)	165(42.53)
infection Ritual	107(42.97)	39(50.00)	07(11.48)	153(39.43)
Untouchable for 4-6 weeks	09(03.61)	17(21.79)	31(50.82)	57(14.69)
Others	-	11(14.10)	02(03.28)	13(03.35)
Total	249	78	61	388

Others Rest essential/ to prevent evil eye/ to protect against cold wind/ reason not known.

Janamghutti and gripe water

53, 57 & 73% of urban, rural and tribal mothers respectively were giving janamghutti to their babies(Table 32). 58% were giving on elders advice while and 23% influenced by advertisement and started janamghutti to the baby's. 80% of the mothers started janamghutti immediately at birth or within one month and remaining after one month. 34% of rural and tribal mothers were using ready made janamghutti available in market. The doses was variable from few drops to few spoons per day.

Gripe water was used by 3%, 17% and 47% of mothers from urban, rural and tribal areas and majority (74%) were giving it by elder's advice(Table 33).

Table 32 Source of inspiration for starting janamghutti

Source	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Elders advise	116(59.79)	59(90.77)	30(53.57)	205(65.08)
Advertisement	64(32.99)	00	07(12.50)	71(22.54)
Others	14(07.22)	06(09.23)	19(33.93)	39(12.38)
Total	194	65	56	315

Others Friends/ senior visitor in family/ local vaidya/ "RMP" doctor/ "on our own"/ traditional

Table 33 Source of advice for starting gripe water fornewborn

Source Advice	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Elders	84(74.34)	20(76.92)	33(70.21)	137(73.66)
Advertisement	21(18.58)	04(15.38)	10(21.28)	35(18.82)
Others	08(07.08)	02(07.69)	04(08.51)	14(07.53)
Total	113	26	47	186

Others Friends, neighbours, visitors, distant relatives.

Maternal care

Table 34 Nature of Lactagouges Measures taken for increasing milk outputs

Measures	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Medicines	113(39.51)	33(30.56)	36(37.11)	182(18.82)
Milk	46(16.08)	18(16.67)	19(19.59)	83(16.90)
Enriched Ladoos	61(21.33)	22(20.37)	17(17.53)	100(20.37)
Ajwain or suva water	52(18.18)	29(26.85)	15(15.46)	96(19.55)
Others	14(04.90)	06(05.56)	10(10.31)	30(06.11)
Total	286	108	97	491

Others Saunf, soonth, peeplamul, ashwagavidha, ghee, Dispensed/ prescribed by a doctor/ harara/ hud/ hot foods/ maithi/ til/ hot milk.

(iii) Dietary restriction during lactation (Table 35)

Table 35 Restricted food stuffs in mother's diet when she is nursing the baby.

Restricted Food Stuffs	Urban (%)	Rural (%)	Tribal (%)	Total (%)
Vegetables	172(63.70)	36(32.73)	17(34.69)	225(52.45)
Fruits	43(15.93)	33(30.00)	15(30.61)	91(21.21)
Milk and Milk products	36(13.33)	26(23.64)	11(22.45)	73(17.02)
Non vegetarian	09(03.33)	—	02(04.08)	11(02.56)
Others	10(03.70)	15(13.64)	04(08.16)	29(06.76)
Table	270	110	49	429

Others Roti/ Rice/ pulses/ cold and hot foods/ sour foods/ brinjal/ onion/ garlic/ cold water or cold milk.

DISCUSSION

In interpreting results of the survey it is to be borne in mind that the sample of 910 respondents was predominantly urban (59%) and a little less than half of these mothers were illiterate. Moreover failure to respond to many of the questions was also observed. Many of the urban, rural and tribal areas surveyed for this study were under surveillance and active intervention by non-government organizations and ICDS and therefore may not truly represent the extent of practices actually followed. Still the authors hope that this National Survey would be a link between the existing literature and the TPNC currently prevalent in the country. [The references used in the following discussion are the same as in the section of Review of Literature of Traditional Practices in Neonatal Care].

ANTENATAL EVENTS

Overall about one-third of the respondents received antenatal care (more than 2 visits) of which 41.15% were urban mother, 17.26% and 23.41% were rural and tribal mothers. The figures are higher than other studies(6,7). We can only explain this on the basis that most of the urban slums, rural and tribal regions surveyed were under surveillance and intervention by non-government organizations and various local health bodies in addition to routine government health functionaries. In contrast to such levels of ANC, 70-80% of mothers actively sought antenatal advice from elder women in the family, visitors and other neighbours. We infer from this that such 'non-formal' antenatal advice probably replaces formal ANC, resulting in low levels of pregnancy registration(6) and ANC(6,7). Dais are usually involved in conducting deliveries and not in ANC(8), this may also contribute to perpetuating the feeling in the community that ANC is unnecessary. In our survey ANC was usually offered by a doctor, specially in urban and tribal areas, trained dais were found to be offering only 9-11% of ANC. Similar observations have been made in other parts of India(8). Thus advice by elders was elicited as the most common factor responsible for motivating mothers to take ANC(37%). The direct causes for not taking ANC were ignorance, non-availability of services, difficulties in receiving ANC etc..But the large number of non-responders to questions related to ANC points out to more subtle influences at work.

Half of the mothers recognised that they had

problems" during pregnancy but only 10-36% ould recognise serious problems. Thus the con-ept of a serious problem indicating pregnancy 'at risk" was encountered in only about 25% nothers. It is heartening to note that about 14% ural and tribal mothers wanted to consult the doctor, family elders were looked up for advice as much as dais by these mothers. We infer that family elders are one of the most important deter-minants of antenatal care and advice for pregnant women. It is possible that mothers get satisfied from the advice of elders and do not feel the need for ANC. It is also possible that elders, being ignorant themselves, do not actively encourage mothers to take ANC. Thus a potentially benefi-cial custom(of elder's advice) becomes **poten-tially harmful;** more so when distances are long and ANC is difficult to receive.

A significant number of mothers were observed to make dietary changes,both addition and re-striction of food items during the pregnant state appears to be customary. Addition of foods for pregnant women can supplement the additional calories needed, such practices are **potentially beneficial,** but unfortunately they carry with them the inherent hazards of food taboos and food fads. Curtailment of calorie rich foods has been observed in other studies (10, 12-14), this along with unrestricted physical activity increases "the calorie gap", thus adversely affecting the out-come of pregnancy(2). Hence unrestricted work along with restriction of food(s) is a **harmful practice.**

Traditional methods to protect pregnancy, as encountered in survey and literature, appear to be benign, but since mothers felt that these should be continued, these practices may create a false sense of security, thus the pregnant mother may not seek/avail of the true methods of protecting pregnancy(antenatal care for tetanus toxoid, high risk identification, and so on). We therefore group these practices as **potentially harmful.** Since not allowing a pregnant women to go out in an eclipse is common and there is no scientific data on the hypothesis that exposure during eclipse may lead to congenital malformations, we iden-tify this as an **area of research.** Food restriction for easy labour which is done with the view that the child may otherwise become too big to deliver is a **harmful practice** because it depletes the caloric intake during pregnancy. Traditional practices for sex prediction may carry an inherent risk of the mother getting neglected if a female offspring is predicted and we categorise these as **potentially harmful.** Intake of specific food items for better characters of the baby (fair col-our, good hair, good weight) can add to the caloric intake of the mother provided these food items do not replace the normal diet. No such substitution for normal diet was encountered either in the survey or literature, therefore, these are **poten-tially beneficial practices.** Traditionally, the place and person for delivery is fixed in advance, this is a **potentially beneficial practice** and can be used by health functionaries to intervene in and monitor home deliveries. Prior cleaning of the room for delivery is practiced frequently in our country and is **potentially beneficial,** provided the home delivery is conducted by TBA with aseptic precautions.

NATAL EVENTS

Both our survey and the literature identify that an important reason for home delivery is social custom. This operated in all areas, more so in rural India(27). The frequency of home deliveries seen in rural areas(91%) can partly be explained by the lack of transport facilities which the moth-ers have cited as an important reason for home de-livery. The problem of transport, non-availability of family members and other domicilliary prob-lems contribute to the decision for home delivery. However, recent results of a multicentric study point out that antenatal visits are not affected by distance, family type, parity etc.(6). Since more than half of these home deliveries were con-ducted by an elderly lady/untrained dai, and similar findings are encountered in other studies

(13,26,27), the practice of home delivery is **harmful under the prevalent circumstances** This is so particularly because it leads to/is a cause of the ineffective utilisation of the services of the currently available health functionaries. The tradition of the elderly lady in the family conducting the delivery is definitely a **harmful practice.** Such a tradition interferes with utilisation of health services and can contribute to infection and asphyxia at birth. The practices of not washing hands/inadequate hand washing, repeated per-vaginal examinations, not using gloves(wherever available), during conduction of delivery are definitely **harmful practices;** the need for asepsis cannot be over emphasized. In our survey, simple hand washing was done only by 29% of personnel conducting delivery. Even where hand washing is done it is more so a ritual rather than aimed at asepsis, and is therefore done in a cursory fashion, often without soap, and many a times the hands are wiped later on by a dirty cloth(9).

POSTNATAL EVENTS

Cutting the cord with scissors, blades, knives that have not been boiled, using traditional substances like kumkum, ash, ghee(9,24,28) are all **harmful practices.** These are by and large either customary or probably due to involvement of untrained people in conduction of delivery. Similarly, resuscitation practices as encountered in the survey and/or literature(7,10,18,40-42) waste time in initiation of positive pressure breathing and also carry the risk of hypothermia and birth trauma. These practices are **harmful.** The first bath immediately after birth appears to be universal but commoner in rural areas, and is fraught with the risk of hypothermia(7,13,14), more so in low birth weight babies. Hence immediate bath is a **harmful practice.** The bath may be postponed For 4-6 weeks especially in case of preterms and IUGR newborns. It is expected that by this time the post conceptional age and weight of the child would have reached better levels leading to improved thermal stability. The removal of vernix at birth is **potentially harmful** since it is known to prevent heat loss. Keeping the delivery room warm is traditionally practiced all over the country and this is a **beneficial practice**(18), although even a warm room should not allow for baby bath at birth. Tight wrapping of the newborn can prevent some heat loss, but swaddling with tightly wrapped cloth diminishes heat production by muscle activity, can interfere with respiratory movements and places the newborn at risk for aspiration. Swaddling in India has not been extensively studied and we do not know the exact form in which it is practiced. It appears on conjecture that it is unlikely for any caretaker to wrap the newborn very tightly. Since the practice carries potent harm as well as benefit, we identify that swaddling is an **area of research** in India.

Kajal application has been found to be universal(7,10,13,36), nearly half of the mothers used home made kajal. Since kajal application carries a definite risk of conjunctival infection, the practice is **potentially harmful** and ought to be discouraged(9). Surma application has been found to be prevalent in North India, the practice is **potentially harmful,** since higher lead levels are met with (62) in these children. Since there is no literature available for the neonatal period this can also be taken up as an **area of research.**

The practice of baby massage is also universal and traditional (custom, elder's advice) (9,13,44,70). Baby massage , if frequently done by the mother herself, can promote mother-infant bonding,and oil massage may provide some warmth and nutrition to preterm newborns. We consider it a **beneficial traditional practice** if done by the mother.

More than 70% of mothers gave the initial feed within 6 hours of birth in rural and urban areas, however the first feed was breast milk only for 9% of newborns. This practice is due to the traditional prelacteal feed(43,44,53,54,55), the com-

mon belief being that either the baby is not able to suck or the breast milk is not enough on the first few days. In line with these observations, nearly 76% of rural mothers were found to be discarding colostrum considering it to be harmful to the baby or dirty, or discarding it because it is customary to do so. We infer that the traditional practices of prelacteal feeds and discarding colostrum strongly interfere with early initiation of breast feeding(30,44,53) and consequently can deprive the newborn of beneficial colostrum and establishment of adequate lactation. Moreover unhygeinic prelacteal feeds or their administration in an unhygeinic manner can carry a substantial risk of infection and aspiration if given in a lying posture or to a crying child(53). Delayed breast feeding, prelacteal feeds, discarding colostrum - all are so much interrelated to each other that they cannot be considered separately from each other ;these practices are definitely **harmful** in the way they are being practiced today.

Nearly 60% of mothers reduced their breast feeding when they had ordinary illnesses presuming that there was some change in the quantity and quality of milk. These are **potentially harmful practices** since most of the time ordinary illnesses of the mother do not interfere with the baby's health; withholding breast feeding during such maternal illnesses may lead to inadequate lactation after recovery.

Cleaning of breasts and demand feeding were common, we identify them as **beneficial practices.** Supplementary feeding in the newborn period with animal milk was practiced by approximately half the mothers, the reason given was inadequate breast milk. This area needs more **data collection and research.** It is likely that the practices related to the first feed and withholding breast feed during illness contribute to inadequate lactation;and for the while these are to be considered **harmful practices** (because of low levels of sanitation and the use of bottle feeding by 50-60% of urban and rural mothers in our survey).

Common ailments in the newborn were found to be managed by (i) traditional,indigenous medicines and (ii) superstitious practices.(7,9,10,61). Modern medicine has not evaluated the exact role of indigenous medicines which originate from ISM. These are definite **areas of research.** Till results of well controlled trials are available, these home-preparations with presumed medicinal values are, in our opinion, **potentially harmful**, since they may create a false sense of security/complacency and the danger signals of illness may get ignored.

In the same way,superstitious practices (evileye, 'Nazar Utarana', Jhad-Phunk),are definitely **harmful practices.** In addition, these traditions (i and ii) perpetuate the vicious cycle of ignorance, disease and exploitation by local quacks and commercial manufacturers. The exploitation is exemplified by the widespread use of preparations like 'janam ghutti' (which also has origin from ISM) and 'gripe water'. These preparations are given without any specific indications, dosage, contraindications, and the formulations are blatantly pushed by way of advertisement. 12-32% of mothers in our study were using the ghutti because they got inspired from advertisement; it is likely that the elders who 'inspired' the other 50-90% of the mothers were also influenced likewise.

Traditional practices in relation to lactation and lactagogues were found to be widely prevalent in our survey and also in the literature(24,84,86). Restriction of foods during lactation is a **harmful practice,** since the caloric needs at this time are greater than even for pregnancy(22,36,60). Common measures for increasing the milk output were identified as (i) enriched foods and (ii) indigenous substances of presumed medicinal value. Food supplementation is a **potentially beneficial practice,** so long as these enriched foods do not necessitate an accompanying cur-

tailment in the normal diet and do not place undue economic burden on the scant resources traditionally allotted to the mother in India. The indigenous medicines used as lactagogues stem from ISM literature,and we identify them as an **area of research.** Isolation of mother and child is commonly practiced(60-80%) But the room is often dark and ill ventilated but the basis of the practice is sound and thus it is a **potentially beneficial practice.**

LIMITATIONS OF THE SURVEY

Traditional practices indirectly reviewed directly elicited in survey remain of an anecdotal nature - as told by women to interrogators. Very few have a precise epidemiological approach. There are hardly any reports based on observations of the actions actually taking place - this can lead to some, though not significant, contextual differences.

The methodology for selection of mothers for survey was originally specified to the surveyors. However, in many instances the selection has remained arbitrory. It is probable that some TPNC have been missed altogether and some have been overemphasized.

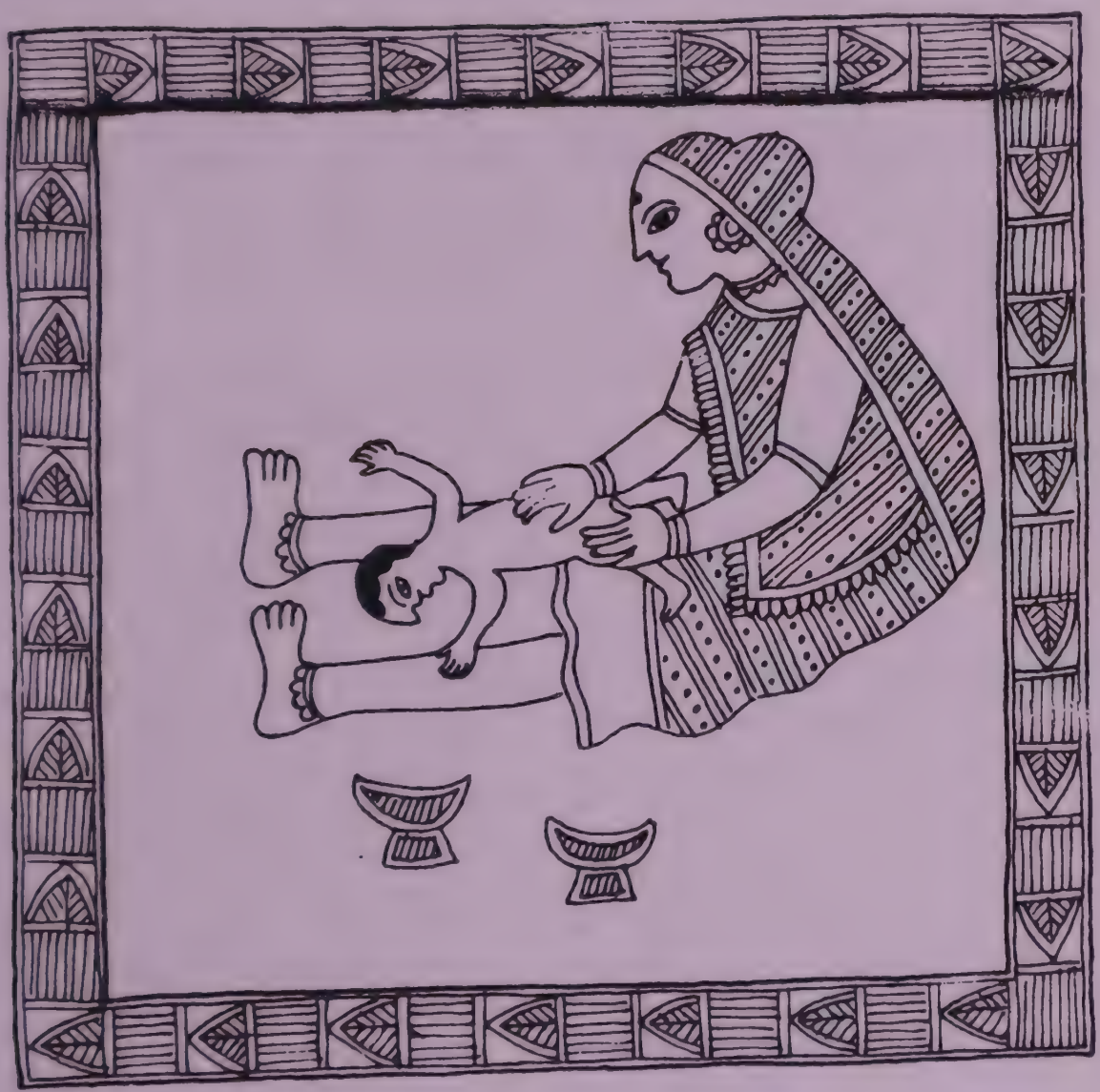
The reports do not cover structured assessments of traditional neonatal practices. Thus this survey is by no means complete, but is definitely a beginning.

The survey by and large represents a cross-sectional approach to traditional practices affecting neonatal morbidity and mortality. This difficulty is faced in other similar works, because much of the evidence we have of so-called traditional societies is taken like a snapshot at one point in time, there is tendency to miss the essential fluidity of many social situations, which change as circumstances change(1).

Acknowledgments

The authors gratefully acknowledge the help of Dr. Rakesh Sharma, Dr. Darshan Shah, Dr. Swati Goswami, Dr. T.Raja, Dr. Salim Sheik and Dr. Ashish Sood in analysis and compilation of the results of the survey.

Section – V



PERSPECTIVES OF MCH CARE IN A DEVELOPING COUNTRY.

Dr. P.M. Shah

he present scenario neonatal deaths account 50-52 % of infant deaths. The LBW rate is ve 30%, and one third(250,000) of neonatal nus deaths occur inS.E.Asia. Birth asphyxia kills 1.2 million babies and handicaps an equal number every year in developing countries. 85% of the babies delivered in hospital have hypothermia within 2 hours in Kathmandu.

PERINATAL AND NEONATAL CARE IN INDIA

AR	ANC REG	BIRTH U. T.	BY (%)	BW	LBW(%)	PRETERM	ASPHYXIA	INFECTIONS
61-70	-	92(R)	43(U)	2703	29-37	14-24	10-12	6.2
71-80	-	77(R)	36(U)	2800	26-48	11	6-10	10
81-85	40-60	76(R)	35(U)	2800	25-40	10-16	10	6-12
86-90	40-60	-		2900	25-38	7-10	7-10	3-10

) —> Rural. (U) —> Urban. U.T. —> Untrained Personnel
NC REG —> Antenatal Care Regularly.

e post-neonatal IMR is reducing rapidly than onatal mortality rate due to recent technologi- l inputs (Universal immunization, ORT....). here is a wide gap between scientific knowlge and its application where it is needed to duce neonatal and still births. More than 85% deliveries are at home, i.e., 20-22 million/ ar - mostly by TBA's and family members. enefits of scientific expertise go to only 4-5 illions despite an increasing number of pedia- icians, obstetricians and neonatologists.

ealth of the newborn is the direct result of (i) ealth of the mother prior to and during pragncy; (ii) Quality of care during and after delivy.

The reasons for the present scenario are (a) obvious and often repeated socio-cultural and economic factors: which will continue for decades; b) distance, transport and communication problems; c) training and practices of neonatologists are suitable to a developed country and are institution-based; d) appropriate practical and feasible technologies, approaches, skills are not provided to those who conduct most of the deliveries and provide care to pregnant women; e) mothers, family and community members are not actively involved in self-diagnosis and self-care.

Neonatologists/ pediatricians/ obstetricians can recognise their 'exact' role in reduction of mortality/morbidity through i) adaptation, use and

*Medical Offficer, MCH, WHO,Geneva

advocation of appropriate technologies and approaches including risk concept. ii) Training trainers of TBA's, CHW's and medical and nursing students in detection, prevention and management of those conditions. iii) Take joint actions with obstetricians, nurses and formal health systems and CHW's. iv) Develop strong links with TBA's. v) Involve community groups and mothers. vi) Advocate and ensure strengthening of referral levels. vii) IAP/WHO/UNICEF collaboration.

It is extremely important that traditional practices in MCH be studied so as to understand what the mothers, families, TBA's, CHW's, perceive and do regarding "at-risk" conditions. Whatever are harmful practices need education, whatever are positive practices need encouragement. If any of the practices seem to be appropriate, scientific verification is to be carried out. Such evaluation should have incorporation, adaptation of the recent appropriate technologies and techniques, wherever possible.

THE STUDY OF IMPORTANCE OF TRADITIONAL HEALTH PRACTICES

Dr. Meharban Singh

The ancestral or conventional child care practices are by and large based on core knowledge and wisdom although some of them may have emerged purely from intuition and superstition. The traditional practices are influenced by the educational level, socio-economic status and value system of the family and community, rapidly changing life style and introduction of modern medicine has caused confusion in the minds of tradition-bound people and their promoters in the Indian system of medicine. There is evidence to suggest that traditional health care practices have a definite link with the science of Ayurveda.

Utility of Traditional Health Practices. Most of our health care practices have their origin in our traditions based on core knowledge and wisdom of our ancestors, they have become part and parcel of our life style, are readily available at the door step of the people and are readily acceptable to the society. They are cheap, affordable and can be utilised by a large segment of our community. The traditional practices and home remedies are promoted by village healers, mid-wives ,physicians practicing Indian system of medicine (ayurveda, siddha, unani), charaltans, quacks and of course wise old people of the community. It is difficult to change them even when they are identified to be useless or harmful.

Types of Traditional Health Care Practices. The health workers must be conversant with common customs and beliefs pertaining to health care of children in the area of community in which they work.

(i) Useful Traditional Practices. A number of traditional health practices for the care of newborn babies are useful and based on sound scientific basis and logic(Table 1). They must be promoted and actively encouraged in the society. Their promotion shall facilitate the participation of the community and their acceptability of the health care providers of modern system of medicine. These practices are more appropriate to serve our health needs as they are based on simple technology. A large number of diseases are minor and self limited and it is appropriate to treat them with safe and cheap home remedies.

Table 1. Useful Traditional Practices.

Confinement at mother's place.
Isolation of the mother-child dyad for 40 days.
Oil massage.
Universal breast feeding.
Instillation of colostrum in the eyes.
Use of cup and spoon or "paladey" for top feeding.
Baby sleeping on mother's bed and latter avoiding to turn her back towards the baby.

ii) Harmful Traditional Practices. It is essential that community must be educated so that harmful rituals pertaining to child care can be stopped. There is an urgent need to inform and educate the promoters of traditional practices and remedies such as village healers, mid-wives, physicians practicing Indian system of medicine and quacks etc. regarding the dangers of some of the traditional practices which are rampant in our country.

* Professor and Head, Department of Pediatrics, All India Institute of Medical Sciences, New Delhi- 110 029

Table 2 : Harmful Traditional Practices.

Eating less food during pregnancy.
Conducting delivery in a dark and ill ventilated room.
Use of rags/dirty clothes during delivery.
Use of unsterile knife for cutting the cord.
Application of ash, cow dung, catechu, turmeric etc. on umbilical cord.
Bathing the baby at birth.
Discarding colostrum and delaying breast feeding.
Giving water to breast fed babies.
Avoiding certain foods during lactation such as pulses, legumes, vegetables, some fruits etc.
Discrimination against girl child.
Opium for diarrhea/crying child.
Kajal application.
Pacifiers.
Dilution of milk.
Castor oil for constipation and diarrhea.
Delayed weaning.
Branding.
Instillation of oil and urine for ear ache.
Disease as personification and wrath of goddesses.

(iii) Innocuous or Inconsequential Traditional Practices. A large number of traditional practices are apparently harmless or innocuous but are widely practiced (Table 3). Unless their hazards are recognised, it is best to ignore them because a concerted drive against these practices may actually be counter productive, though most of these practices may lead to delay in seeking medical aid with resultant deterioration of the child.

Table 3 : Innocuous or Incosequential Traditional Practices

Prelacteal feeds : glucose water, honey, jaggery water, cow's urine, donkey's milk etc.
Ear pricking, talisman, amulets, removing "Nazar" by burning lahi, chillies, and alum.
Circumcision.
Tying neem leaves on the door of the house.
Massage of anterior fontanel.

iv) Traditional Practices of Doubtful or Uncertain Utility. A number of popular child rearing practices are of uncertain or doubtful utility(Table 4). There is certainly a need to systematically study the utility, futility and possible dangers of these traditional practices. The blind faith in the traditional health practices of doubtful utility may lead to non acceptance of modern system of medicine.

Table 4:Traditional practices of Uncertain/ Doubtful Utility

Janam ghutti.
Gripe water.
Boiled water containing anisi, cummin seeds, ilachi
for the mother after delivery.
Use of a variety of traditional galactogogues : garlic, ginger, coconut, jaggery, bajra, ghee, fenugreek, panjeeri, sonth, khaskhas, sathavari, pepper, margosa, jeevanthi etc.
Brandy for URI/pneumonia.
"Hot" and "Cold" feeds.
Avoiding exposure of pregnant woman to eclipse.
Use of copper, steel and magnetic bracelets.
Figure 1.

Study of traditional practices.
|
Appropriate health education strategies.
|
Change in health behavior.
|
Community participation.
|
HEALTH

The importance of studying traditional health care practices.

TRADITIONAL PRACTICES OF NEONATAL CARE IN MANIPUR

Dr. Libemtombi Devi

ne state of Manipur is the eastern most state of dia at Indo-Burma border with an area of 22,327 . kms, population - 14,20,953, among which heduled castes are 1.2% and scheduled tribes e 27.3%. The number of trained dais upto 1990 ere 1483.

the distant rural and hill areas,out of 3455 deveries, 133 are attended by doctors, nurses, idwives and trained birth attendants. The perentage of births (deliveries)attended by untrained irth attendants and helpers 'Mayoknabi' bemes 96%, while in urban areas 50% of child irth is attended by traditional birth attendants. n an average 73% of the deliveries in Manipur re attended by traditional birth attendants and elpers. In Manipur 30% of the birth attendants emove secretions by clothes, hands and by putng the baby upside down by holding legs, by nassage, hooking and turning aside, in a rare ncidence by "HUITRI" (an instrument used to eat cotton): by playing it on the abdomen and hanging the position of the baby (if baby does ot cry at birth and is blue). 1% of the traditional irth attendants blow air in the mouth of the leeply cyanosed newborn. 10% of the dais blow ir at the anterior fontanelle of the blue or very ale baby who does not cry at birth. None ossess rescucitation equipment like mucus suckrs etc.

***MEETEI FAMILY :** The traditional birth atendants conduct delivery by different methods f manual pressure with her hands or with the elp of the flexed knees of the woman in labour. There are washed clothes for the baby. As soon as the head of the baby is out, the mouth and face is cleaned with any cloth. Baby is kept on the cloth available, as soon as the placenta is out, a freshly prepared bamboo blade is used to cut the cord, A 1/2" to 4" away from the umbilicus. A thread (Langhing) which is unwashed and made from cotton thread prepared at home or any available fresh thread is used to tie the cord. Baby is given a bath and the washed clothes kept for the baby are used. After 1-2 hours a woman in the neighborhood who is already breast feeding gives the breast feeding for a couple of days. Then the mother starts breast feeding the baby. This deprives the child of colostrum.

In case the baby does not cry the dai(TBA) will hold the baby by the legs upside down, will turn the baby side to side, will massage and take out water from the mouth, will blow with her own mouth at the anterior fontanelle. If there is any pus at the umbilicus the earth from the fireplace which has been burning red is cooled down and powdered, and the strained very fine powder is applied to the infected umbilicus; otherwise nothing is applied and the cut cord is kept open.

***SCHEDULED CASTES :** The above procedure is done only if the umbilicus is infected. Ash, or the earth from the wall is scrapped, powdered and applied on the umbilicus. Blades or scissors are used to cut the cord.

***SCHEDULED TRIBES** (KUK) : The procedure is the same. The TBA waits till the presenting part comes out (e.g. the head) then the head is

* Professor and Head, Department of Paediatrics, Regional Medical College, Imphal

pulled out with twisting movements. A blade is used to cut the cord. If baby does not cry, upside down position is used. When it cries, a piece of cloth is soaked in water and the baby is made to suck, later on breast milk is given after 2-3 hours.

***RONGMEI :** Double tie is used for cord after cutting it with a blade: water and honey are given before milk comes out of breast after about 2 days after delivery.

***GANGTE :** After placenta is out, cord is tied with a thread at two places. Breast feeding is done after one day. If breast milk does not come, hen egg is brought,a small hole is made, some part of the egg yolk is thrown out, some part is sucked by the lady. Water and honey are also given to the baby.

***TANGKHUL :** TB attendants attend about 80% of the deliveries. Blade or scissor is used to cut the cord. The cord is tied with a double knot. Cutting the cord is always done after placenta is out. Baby is breast fed as soon as baby cries and can suck. If baby is born blue massage with turning side and holding upside down (hooking) is done.

***MUSLIMS :** Abdominal examination and internal examination is done by TBA if there is too much of delay. Some difficult cases are sent to hospital. Two hands are used to push down the baby from above sides and back with some help.If the baby is born blue or does not cry, cold water is sprinkled on the face and the baby is put upside down. Milking of the umbilical cord is done. The plancenta is warmed up with hot water. Vigorous massage of the body is done. Cord is cut with a blade after the baby has cried, two knots are given with a folded thread.

Bath All babies are given bath by warm water, in muslims if there is rash no bath is given.
Feeding Mother substitutes give breast feeding in Meetei family for two days. Colostrum is not given.
Isolation Is done very strictly in Meetei family for 12 days. Partial isolation in done for 40 days in muslim families. In other tribes,for a variable number of days the baby and mother are kept a little aloof. In Meetei family, religious ceremonies are done on the 6th day and washing of the mother, clothes. etc on the 12th day.

Temperature Warming up of the room is always done; baby is kept warm by the mother and relatives. If mother does not have breast milk andif no mother substitute is available (rarely), artificial milk is given. Mother or wet-nurse warms up herself before breast feeding.

COMMUNITY CONTRIBUTION. As soon as a newborn arrives relatives, friends and local people give some eatables and money for the baby and mother. In Meetei family it is mostly done on the sixth day after birth, and upto 40 days in muslims.

TRADITIONAL PRACTICES FOR COMMON NEONATAL AILMENTS

ISOLATION: Whenever any newborn has fever, vomiting, refusal of feeding, cyanosis or convulsion, it is taken that an evil eye of some spirit has been set on the newborn. Newborns and mothers are well protected and isolated for twelve days in Meetei families.

Blowing Ceremony - Whenever the baby falls sick, a traditional male healer, sometimes a woman healer will prepare some particular herbs, leaves (Tairen in Manipuri is believed to have antiseptic property) are kept on a specially prepared flat round bamboo product (Yangkik) used for husking rice. Then Mantra or words on charms are chanted. Blowing air on the head of the newborn is done. Some of such practices are observed in

ural areas of Thailand also.

ORAL MEDICINES - are avoided during pregancy, neonatal period and lactating period, as far s possible. Restriction of sour, oily and hot food luring early lactation period, ie, 40 - 120 days is lone to prevent the newborn from diarrhoea or ny other gastric upset. In case of fever or respiratory tract diseases,very occasionally, the young nfant is given in very small quantity, the water oiled with leaves of a plant(Adualasa called Nongmangkha) which has flowers containing honey. This liquid is found to be good for bronchospasm. It is bitter in taste.

OIL MASSAGE : For fever or distension of abdomen, massage of the body with mustard oil and very small amount of salt is done. It is put on the area around anterior fontanelle also. Smashed garlic, vegetable juice or juice of certain leaves also are kept on the scalp in case the infant has fever on convulsion.

CROCODILE BILE / BILE OF WILD BEAR : is used in very small quantity mixed with drinking water for fever and gastric upsets of infants. This is more common amongst the Anal tribe of Chandel district. In certain areas Crab-juice (Karha) i.e. water boiled with crab is used for gastro-intestinal problems of infants. In plains specially amongst the Meeteis, use of Sandal wood, powdered and mixed with water fro local application is done for fever, swelling and lymphadenitis etc. Sprinkling of water with Tulasi or Tairen leaves dipped in it (plants with antiseptic properties) is done in the room of the mother and newborn usually on the sixth day after delivery or when the infant is sick.

WARMING UP : is always done before child birth, after birth and neonatal period. Gentle massage is in practice for any illness fever on upper respiratory tract infection. A dry herb (Khoiju Leikham with antiseptic properties) is burnt sometimes to drive out evil spirit. The mother takes rest for a short while and warms her hands before handling the baby for breast feeding. She believes in such'practice' to prevent neonatal diarrhoea.

BREAST FEEDING : The best belief prevalent in thehills and plainsin the community is Breast-milk is Heavenly Amrita which is a remedy for any ailment during infancy. If the mother does not conceive again, many infants continue sucking breast-milk beyond two years even.

WET NURSING : is very popular when the mother is sick or dead. This is a very common practice in Meetei family specially in the first two days after family. The wet-nurse on mother substitute is very much respected in the family.

***MISCELLANEOUS :** In Largdang village of Ukhrul district and in some other tribal villages chewed rice is given even to the newborn. Giving chewed food is practiced in some Meetei family, also. Now it is mostly given up.

In Manipur there are 2035 villages and there are above ten thousand women involved in traditional neonatal care practices. To equip them with skill and emergency care kits for the neonates will go a long way in reducing neonatal deaths and morbidity.

*Indicate names of different ethnic groups.

CULTURAL AND REARING PRACTICES OF NEWBORNS OF MOTHERS VISITING AN URBAN HOSPITAL AND IN URBAN SLUMS

Dr. Arvind Saili

India is a land of mixed cultures. Different child rearing practices reflect the intelligence, social customs, beliefs, traditions, superstitions and health behaviour of the people. In turn these practices affect feeding habits, growth and development and psychologic personaility of generations.

MATERIAL AND METHODS A total of 420 mothers delivered within 6 months were evaluated. Of these 120 were attending the well baby clinic of Kalawati Saran Children Hospital, New Delhi,and 300 mothers belonged tothe neighbouring slums. Each evaluation was conducted by an interview by a pediatrician on a pretested questionnaire.

OBSERVATIONS The observations are summarised in Table 1 to 15 (SIG = statistical significance). All figures in parenthesis in these tables indicate percentages.

Table 1. Age and Sex characteristics of study population.

ITEM	HOSPITAL	SLUMS	TOTAL	SIG
MALE	72(60)	187(62.3)	259	NS
FEMALE	48(40)	113(37.7)	161	
MATERNAL AGE				
< 20 YRS	16(13.3)	40(13.3)	56	
20 YRS-30 YRS	89(74.2)	224(74.7)	313	NS
> 30 YRS	15(12.5)	36(12)	51	

Table 2. Socio-economic characteristics of study population.

ITEM	HOSPITAL	SLUMS	TOTAL	SIG
SES				
SEG III,IV	60(50)	300(100)	360	
SEG I,II	60(50)	0	60	S
EDUCATION				
FORMAL	86(71.7)	15(5)	101	
NON FORMAL	34(28.3)	285(95)	319	

Associate Professor, Dr. S. Kumari,
Associate Professor, Lady Hardinge
Medical College, New Delhi.

Table 3. Parity of mothers and type of family.

ITEM	HOSPITAL	SLUMS	TOTAL	SIG
PARITY				
PRIMI	48(40)	56(18.7)	104	
MULTI	72(60)	244(81.3)	316	S
FAMILY				
NUCLEAR	42(35%)	264(88)	306	S
JOINT	78(65)	36(12)	114	

Table 4. Place and Personnel : natal characteristics.

ITEM	HOSPITAL	SLUMS	TOTAL	SIG
PLACE OF DEL				
SKH	98(81.7)	4(1.3)	102	
OTHER HOSP	12(10)	20(6.7)	32	
HOME	10(8.3)	276(92%)	286	
CONDUCTED BY				
DOCTOR	24(8)			
TRAINED DAI	71(23.7)			
UNTRAINED DAI	180(60)			
OTHERS	25(8.3)			

Table 5. Timing of first feed & type of feeds given.

ITEM	HOSPITAL	SLUMS	TOTAL	SIG
TIMING OF FIRST FEED				
12 HRS	80(66.7)	84(28)	164	
12-24 HRS	4(3.3)	68(22.7)	72	S
24 HRS	36(30)	148(49.3)	184	
TYPE OF FIRST FEED				
BREAST	50(41.7)	86(28.67)	136	
TOP	60(50)	12(4)	72	S
PRE LACTEAL	10(8.3)	202(67.3)	212	

Table 6. Pattern of breast feeding.

ITEM	HOSPITAL	SLUMS	TOTAL	SIG
BREAST FEED				
YES	114(95)	300(100)	414	
NO	6(5)	0	6	
FREQUENCY				
DEMAND	94(78.3)	300(100)	394	
TIME	26(21.7)	0	26	S

Table 7. 'Ghutti' administration & type of prelacteal feeds

ITEM	HOSPITAL	SLUMS	TOTAL	SIG
GHUTTI				
YES	60(50)	268(89.3)	328	
NO	60(50)	32(10.7)	92	
TYPE OF PRELACTEAL FEED				
GUR+WATER	155(76.7)			
HONEY	35(17.3)			
WATER	10(5)			
GHUTTI	2(1)			
GLUCOSE WATER				

Table 8. ANC and restriction in maternal diet.

ITEM	HOSPITAL	SLUMS	TOTAL	SIG
RESTRICTION IN MATERNAL DIET				
YES	30(25)	156(52)	186	
NO	90(75)	144(48)	234	S
ANTENATAL CARE				
YES	75(62.5)	50(16.7)	125	
NO	45(37.5)	250(83.3)	295	S

Table 9. Soap and massage.

ITEM	HOSPITAL	SLUMS	TOTAL	SIG
USE OF SOAP				
YES	114(95)	176(58.7)	290	S
NO	6(5)	124(41.3)	130	
MASSAGE				
YES	96(80)	232(77.3)	328	
NO	24(20)	63(22.7)	92	NS

Table 10. Clothing and temperature.

TEM	HOSPITAL	SLUMS	TOTAL	SIG
FREQUENCY OF CHANGING CLOTHES				
ONCE A DAY	6(5)	112(37.3)	118	
TWICE A DAY	26(21.7)	174(58)	200	
THRICE A DAY	88(73.3)	14(4.7)	102	
TEMP. MAINTAINANCE				
HEATER	0	0	0	
BLANKET/SHEET	110(91.7)	210(70)	320	S
NOTHING	10(8.3)	90(30)	100	

Table 11. Cord care and eye care.

ITEM	HOSPITAL	SLUMS	TOTAL	SIG
PROPER CARE OF CORD				
YES	52(43.3)	0	52	
NO	68(56.7)	300(100)	368	S
CARE OF EYES				
YES	28	20(6.7)	48	
NO	(76.7)	280(93.3)	372	S
SURMA/KAJAL				
YES	72(60)	260(86.7)	332	
NO	48(40)	40(13.3)	88	S

Table 12. Family behavior.

ITEM	HOSPITAL	SLUMS	TOTAL	SIG
REACTION TO FEMALE CHILD				
HAPPY	10(20.8)	30(26.5)	40	
UNHAPPY	38(79.2)	83(73.5)	121	NS
FATHERS PARTICIPATION				
NONE	48(40)	284(94.6)	332	
OCCASIONAL	28(23.3)	8(2.7)	36	S
GOOD	44(36.7)	8(2.7)	52	

Table 13. First and subsequent baths.

ITEM	HOSPITAL	SLUMS	TOTAL	SIG
TIMING OF FIRST BATH				
1ST DAY	34(28.3)	174(58)	208	
1-7 DAY	66(55)	126(42)	192	S
> 7 DAYS	20(16.7)	0	20	
FREQUENCY				
ONCE A DAY	24(20)	210(70)	234	
MORE	96(80)	90(30)	186	

Table 14. Practices in cord care and common illnesses.

UNSTERILE BLADE	90%
VOMITING AJWAIN WATER	80%
KNIFE 10% DIARRHOEA	10%
APPLICATION OF GHEE	5%
PAIN ABDOMEN HEENG	65%
FEVER PROPER CLOTHING	
MUSTARDOIL	40%
HALDI+MUSTARD OIL	80%
COUGH AND	
COLD	55%
OIL APPLICATION	
APPLICATION OF SURMA(ASH)	5%
TYING WITH CLOTH	65%

Table 15. Traditional perceptions of disease.

ITEM	HOSPITAL	SLUMS	TOTAL	SIG
BELIEF IN SUPERSTITIONS				
YES	102(85)	264(82)	348	NS
NO	18(15)	54(18)	72	
CAUSE OF DISEASE				
EVIL SPIRITS	90%			
WITCH CRAFT	50%			
EVIL EYE	85%			
WRATH OF GODS	15%			
COLD OR HOT FOOD	100%			
WIND	30%			

RESULTS, ANALYSIS & DISCUSSION

There was no significant difference between the ex distribution between the two groups. A total f 259 males and 161 female children were pres- nt. Similarly the maternal age showed no statis- ical difference between the two groups. Most of he mothers in two groups were in the 20 yrs - 30 rs of age group. There was an equal distribution f high and low SES in the hospital group com- ared to the slums group where all mothers be- onged to the low socio-economic group. There vas a significant difference in the education tatus of these two groups. Most of the mothers in he slum had not received any formal education. The effect of this educational status on the tradi- ional practices has not been studied here.

Family : There was a trend towards joint family system in the hospital group whereas the fami- lies in the slum were predominantly nuclear. This could be attributed to the extremely small size of the jhuggi and the tendency to branch out to a newer jhuggi with the increasing family tree.

A significant statistical difference was observed in the place of delivery. The mothers in the slums preferred the convenience, privacy, closed environment and an ease to look after the family while at home. The hospital group preferred the hospital to make use of the technical expertise available there of. The deliveries were mainly conducted by the dai's in the slums. There was the tendency amongst the slum dwellers to delay the feed beyond 12-24 hrs. This was largely because the first feed was to be given by a specific person - aunt etc. , and the absence of this person caused the delay. In some instances the delay was intentional because the toxic sub- stances in the stomach must be passed out before the child could be fed. Majority of the mothers in the hospital fed the child within the first 12 hours.

Prelacteal feed was a predominant practice amongst the slum dwellers whereas the hospital based group believed in breast/top feeds. Breast feeding was the universal feature amongst the slum mothers, although no statistical difference was found between the two groups. It was equally well accepted by hospital based group.Although the slum mothers universally resorted to the demand -schedule for feeding and most of the mothers in the hospital group also practiced the demand schedule , yet a statistically significant difference was found between the two groups. The use of ghutti was very common amongst the slum mothers although the 50% of the hospital mothers also gave Ghutti to sibs.

A significant difference was found in the dietary restriction in mothers during their pregnancy . It was more prevalent in the slum mothers . The type of restriction was cold foods , heavy foods etc.

An interesting aspect was the reaction to the female child. Despite the year of girl child, major- ity of the mothers were unhappy at the birth of the girl child. This did not differ very significantly with the order of the sib. It was observed that in contrast to the hospital based group the slum mothers bathed their new born sibs earlier. There was the tendency to delay the first bath by the mothers coming to the hospital.

Although the mothers in the slum gave the early bath but their subsequent faith in the bath was a commoner feature amongst the hospital moth- ers. Majority of the slum mothers attributed this to a lack of adequate water supply. Daily bath is not a practice amongst most of the mothers. Mothers using soap in the slum group used deter- gents (555) etc.,and the ones who did not use soap felt that it was detrimental to the delicate skin of the newborn. A few mothers used curd once in a while.

Massage again was a widely accepted practice in both the groups. Ghee, coconut oil and the mus-

tard oil were frequently used agents.There was the tendency amongst the first group mothers to change the clothes more frequently as compared to slum dwellers. Some of the mothers in the slums had no concept or the importance of the temperature maintenance. Nobody used heaters but blankets & sheets were used by a significant number of mothers.

Indian mothers cannot do away with superstitions. Both groups had similar faith or belief in the superstition.Although majority of mothers in the slums brought out sibs in first week or at least within the first month , but a small percentage delayed this to 40 days or beyond.The babies were singularly looked after by the mothers. Very little help from the other sources. There was no concept of the case of the cord amongst the slum mothers while very few cared for the eyes properly.it was a belief amongst slum mothers that surma was good for the eyes apart from its cosmetic value. Looking after the child was considered to be the mother domain by the slum fathers while in the other group.

CONCLUSION There was a significant difference in child rearing in the two groups studies. This can be attributed to i) socio-economic group ii) education and iii) environment.

TRADITIONAL PRACTICES IN TAMIL NADU IN PERINATAL AND NEONATAL CARE

Dr. S.GOPAUL

Various traditional practices are still prevalent in Tamil Nadu in perinatal and neonatal care. Some of them are good and harmless practices which can be followed while others do much harm to the babies. They are categorised as follows.

Traditional practices in/for	Good practices	Bad/harmful Practices
ANTE NATAL PERIOD	Sympathy & emotional suport from family members.	
EXERCISE	Permitting light house hold work.	Manual physical labour working in fields etc. especialy in late Trimester.
FOOD AND NUTRITION	Practice of "Eating for two lives ".	Avoiding certain nutritious foods (considered as harmful for baby):- i)Papaya, rich in Vit. A, considered an abortifacient. ii)Avoiding high fibre diet resulting in constipation, giving castor oil for relief. iii)Rejecting Iron - Folic acid tablets under belief that babies will be dark. (anemic mothersat a loss) .iv) Administering saffron with milk to produce 'rosy' babies spurious and harmful substitutes may have unknown side effects. v) Deficiency in calories with extra expenditureof energy . (especially inLIG) Maternal malnutrition LBW baby.

* M.D., D.C.H. Additional Professor of Paediatrics, Neonatology Department, Institute of Obstetrics and Gynaecology and
Government Hospital for Women and Child, Egmore, Madras.

Traditional practices in/for	Good practices	Bad/harmful Practices
ENVIRONMENTAL	Avoiding exposure to lunar objects & solar eclipse - deleterious ray may harm the foetus.	———
SEPARATION OF COUPLES	Lessens chances of sexual activity both in early and late trimester preventing abortions & preterm labour & Infections.	———
INTRANATAL PREPARATION OF MOTHER PRIOR TO LABOUR	Hot bath given in active labour-hygienic and increases vascularity of active muscles.	———
EMOTIONAL SUPPORT	Allowing the husband to be around at the time of delivery.	———
DELIVERY AREA	Separate corner of a well lit room with adequate privacy. Serves as labour room	———
PREVENTION OF INFECTION	Only the mothers and dais are allowed into the delivery area. Babies are not brought out of the room and no one else is allowed inside till 11th post natal day.	———
RESUSCITATION METHODS	Keeping baby close to the mother Rooming in --- ---	1) Cutting the cord with unclean blade & applying cowdung to umbilical stump (though rare now).

Traditional practices in/for	Good practices	Bad/harmful Practices
		2) Spanking the child to make it cry. to make it cry. 3) Pouring hot or cold water for stimulation. 4) Dilating the anal sphincter.
POST NATAL MOTHER'S DIET	1. Special lady with dal, honey ghee to give enough calories 2. Chewing of betal nut with chunam provides vitamins, iron and calcium to lactating mother.	Withholding certain fruits bananas and mangoes, vegetables, lady finger, greens; even water as 'cold items'; and 'dhal and potatoes'. as gaseous items. Contributes to malnutrition in lactating mother.
EXERCISE	Permitting light house hold and daily chores.	Preventing the mother from doing any work or encouraging strenuous work may lead to over weight or exhaustion respectively.
CARE OF THE NEONATE:		
EARLY FEEDING :	Giving as milk (closest) in composition to human milk) if collected and preserved hygienically is not bad; in "Sevappu;" in Oyanosis asphyxcated babies; hypoglycemic babies are benefited.	1) Pre lacteal feeds like sugar water, honey, warm water. ii)Rejecting'Colostrum as pus or harmful for baby, deprives baby of all essentialy nutrients & immunity. iii)Starving the baby for 3 days in view that mother is not ready for feeds.
CARE OF THE EYES.	Instilling few drops of colostrum - to prevent sticky eyes serves as emollient and is anti infective	i) Applying Kajal to keep off evil eyes (Dhristhti) ii) Instilling oil to keep the baby 'cool'. Any adulteration in the products will cause irritation to the eyes

Traditional practices in/for	Good practices	Bad/harmful Practices
CARE OF THE SKIN.	i)Exposure of babies to mild sunlight serves to provide vitamin D. ii)Acts like phototherapy in physiological jaundice.	1) Smearing with oil & turmeric (as antiseptic allergic reactions may occur. ii) Branding with red hot iron for ailments like jaundice, cyanosis other illness is barbarious.
CARE OF UMBILICUS		Tying a piece of cloth over the stump to prevent 'air' from getting in dirty cloth may give rise to infection.
CASE OF THE BOWEL	Giving omam water as carminative to relieve gripe in baby.	i) Purgatives like castor oil given to keep bowels open-after constipation. ii) Mercury as bowel cleaner heavy metal poisoning and death. iii) Betal leaf stalk soaked in castor oil or small pieces of soap as suppositories infection.
RELIEF OF INFANTILE COLIC		Applying 'Vasambu' (a root) around umblicus; giving 'vasambu' with milk to babies causes haemorrhagic colitis.
BATHING THE NEONATE :	Using luke warm water is ideal.	i) Oil bath by TBA on alternate days with oil instillation into eyes, nose and earsand massaging. ii)Using very hot water and soapnut to remove the oil smeared on the body. iii) Removing the mucous and phlegm out of the baby's nostrils by blowing into mouth and nose by TBA's causes forcing of oil droplets into the lungs lipoid pneumonia and infection from organisms in TBA's mouth.
	Putting myrrh	Too much of it causes smoke and

Traditional practices in/for	Good practices	Bad/harmful Practices
	(Sambarani) in the room of the infant keeps mosquitoes and insects away.	choking of the baby.
OTHER PRACTICES	1) Giving decoction of tender leaves of Marg-osa (neem) to the baby gives Vitamin A concr-ete. (but not necessary since breast milk Vit.A is adequate). 2)Keeping neem leaves at head end of babies insect repellent and antiseptic. 3)Using band with bark of calotropis as insect repellent. 4) Keeping a small lamp lit in one corner of the room visual stimulus for the baby. He plays and makes gooing noices when the parents are fast asleep.	1) Native medicines like Kasturi and Korojanani given to keep babies (gastric irrtants). 2) Baby with incessant cry thought to have sprain in the neck and swinging upside down and rocked brutually.

CULTURAL PRACTICES IN MATERNAL AND CHILD CARE

* SUNDARLAL

To assess the level of understanding and to know the prevailing cultural practices regarding maternal and child care 300 women were interviewed by the SPM Department, Medical College, Rohtak, in 1990. The women belonged to the ICDS area of PHC Dighal, Dish. Rohtak (Haryana). These women respondents were of all categories - pregnant women, nursing mothers, dais, young and old females, and were scattered over 10 villages of the PHC Dighal, block Beri. The interview was conducted using an open ended, pretested questionairre. Out of 300 female respondents 105 belonged to high caste(HC), 100 to backward caste(BC) and 95 to scheduled caste(SC). The relevant results are depicted below (Table 1...5)

Table 1 Need for Antenatal Care during Antenatal Period.

	Respondent Caste/Class.		
Need for ANC assessed as:	**H.C (%)**	**B.C (%)**	**S.C(%)**
1. NEED FOR CHECK UP IN EMERGENCY.			
Yes	96(91.40)	71(71.40)	78(82.10).
No	04(03.80)	18(18.00)	11(11.50).
Do not know	05(04.70)	12(12.00)	06(06.30).
2. BENEFIT OF GIVING T.T. TO PREGNANT MOTHER.			
Do not know	13(12.30)	20(20.00)	16(16.80).
Protection of both Mother + Child	67(63.80)	68(68.00)	58(61.00).
Protection of child	18(17.10)	09(09.00)	10(10.50).
Protection of mother	01(00.90)	02(02.00)	04(04.20).
Any other	07(06.60)	01(01.00)	06(06.30).

* Professor and Head, Department of Social and Preventive Medicine, Medical College, Rohtak (Haryana).

Table 2. Dietary Practices during antenatal period.

	Respondent Caste/Class.		
	H.C (%)	B.C (%)	S.C (%)
1. MORE FOOD NEEDED.			
Yes	73(69.50)	73(73.00)	54(56.80).
No	16(15.20)	15(15.00)	31(32.60).
Do not know	11(10.40)	12(12.00)	10(10.50).
2. REASONS FOR NOT INCREASING DIET DURING PREGNANCY.			
Difficulty during Pregnancy	04(25.00)	02(13.30)	08(25.80).
Makes one sick	08(50.00)	08(53.30)	12(38.70).
Any other	02(12.50)	03(20.00)	03(09.60).
Do not know	02(12.50)	02(13.30)	08(25.80).
3. REASONS FOR INCREASING DIET DURING PREGNANCY.			
Gives energy	24(32.80)	14(19.10)	15(27.70).
Ensures health of Mother + Child.	24(32.80)	15(20.50)	20(37.00).
Mother needs it	14(19.10)	22(30.10)	13(24.00).
Child needs it	08(10.90)	14(19.10)	03(05.50).
Do not know	03(04.10)	08(10.90)	03(05.50).
4. NEED FOR GREEN VEGETABLES IN PREGNANCY.			
Yes	63(79.00)	87(87.00)	82(86.00).
No	10(09.50)	03(03.30)	08(08.40).
Do not know	12(11.40)	10(10.00)	05(05.20).
5. REASONS.			
Provides energy	14(16.80)	30(34.40)	27(32.90).
Maintains health	20(24.00)	26(29.00)	15(18.20).
Makes blood	30(36.10)	29(33.30)	32(39.00).
Contains Vit.	19(22.80)	15(17.20)	08(09.70).
6. NEED FOR IRON + FOLIC ACID IN PREGNANCY			
Yes	86(81.90)	83(83.00)	8((96.60).
No	08(07.60)	04(04.00)	05(05.20).
Do not know	11(10.40)	13(13.00)	01(01.00).
7. REASONS			
Makes blood	32(37.20)	34(40.90)	29(32.50).
Others	03(03.40)	01(01.20)	07(07.70).
Provides energy	35(40.06)	29(34.90)	22(24.70).
Good for mothers	07(08.10)	06(09.60)	04(04.40).
Good for mothers + child	03(03.40)	03(03.60)	07(07.00).
Good for child	10(11.60)	10(12.00)	15(16.80).
Do not know	02(02.30)	06(07.20)	10(11.20).

Table 3. Food restriction during pregnancy.

Foods Restricted during pregnancy.	Respondent Caste/Class. H.C	B.C	S.C
1 .Hot foods.(Chillyfoods/spacy foods).	17(16.10)	16(16.20)	16(16.80).
2. Cold foods(Curd/Lassi) Heavy foods(Bread/Ghee)	04(02.80)	02(02.00)	07(07.30).
3. None	59(56.10)	59(59.00)	43(45.20).
4. Do not know	01(00.90)	04(04.00)	03(03.10).
5. Ploa	04(03.80)	05(05.00)	04(04.20).
6. State foods	02(01.90)	03(03.00)	05(05.20).
7. Others	11(10.40)	07(07.00)	16(16.80).
REASONS FOR FOOD RESTRICTION.			
1. Hot foods cause abortion	06(13.10)	08(21.60)	11(20.30).
2. To avoid umbilical infection	03(07.50)	03(08.10)	21(03.70).
3. Lass/Sour foods cause cough	—	01(02.70)	—
4. Milk causes abscess	02(05.00)	02(05.40)	02(03.70).
5. Causes cold	02(05.00)	01(02.70)	02(03.70).
6. Bread causes pain abdomen	02(05.00)	03(08.10)	01(01.80).
7. Seeds of chilly causes stones	—	—	—
8. Causes edema	—	—	—
9. Others	01(02.50)	06(16.20)	04(03.40).
10. Reasons not given	—	05(13.50)	—

Table 4. Feeding practices of mothers in the postnatal period.

Feeding practices in the post natal period.	Respondent Caste/Class. H.C	B.C	S.C
1. FOOD RESTRICTED DURING FIRST TEN DAYS AFTER DELIVERY.			
1. No restriction	25(23.00)	14(14.00)	13(13.50).
2. Do not know	01(00.90)	07(07.00)	—
3. Heavy foods	15(14.20)	20(20.00)	13(13.50).
4. Cold foods	14(13.30)	22(22.00)	28(25.40).
5. Others(Papaya,Banana,curds and ladyfinger)	50(47.60)	47(47.00)	57(60.00).
6. Milk	22(20.90)	36(36.00)	20(21.00).
7. Grain	49(46.60)	43(43.00)	41(43.10).

2. FOODS GIVEN TO MOTHERS DURING POSTNATAL(AFTER DELIVERY)

. Ajwain	66(62.80)	61(61.00)	47(49.40).
. Cond	22(20.90)	36(36.00)	26(27.30).
. Halwa	73(69.50)	78(78.00)	67(70.50).
. Ghee	17(16.10)	30(30.00)	30(31.50).
5 Gola	31(29.50)	43(43.00)	43(45.20).
. Milk as tea	59(56.10)	19(19.00)	33(34.70).
. Khichri/Dalia	31(29.50)	25(25.00)	34(35.70).
. Others	37(35.20)	30(30.00)	20(21.00).

Table 5. Day on which the initial breast feeds are given to the newborn.

Day on which initial breast feed given to newborn	Respondent H.C	B.C	Caste/Class. S.C
1. Do not know	09(08.50)	01(01.00)	02(02.10).
2. Same day	73(69.50)	66(66.00)	56(58.90).
3. After 1 day	07(06.60)	11(11.00)	09(09.40).
4. After 2 days	09(08.50)	09(09.00)	14(14.70).
5. After 3 days	07(06.60)	13(13.00)	14(14.70).

TRADITIONAL HEALTH PRACTICES AND MARKET REMEDIES.

Dr. M.A. Patel,
M.Pharmaceuticals, Ph.d.,

The preparations of Ayurvedic and Unani drugs is no longer confined to Vaidyas and Hakkims for their patients but has been commercialised by various firms. The Udupa Committee's report disclosed the fact that costly materials such as gold, musk, saffron, etc. which are the active ingredients in various Ayurvedic and Unani preparations are either not used or substituted by imitation products. It was therefore proposed to bring Ayurved and Unani drugs within the scope of the Drugs and Cosmetics Act, 1940 by the amendment in 1964.

The vast majority of Ayurvedic drugs used in neonatal care are as follows.

Category	Name of the drug	Disease in which used
Gripe waters	Ajma Ark & Suva Ark.	Relief of griping in infants.
Liver Tonics	Kumarpatha, of Punarnava & Others.	Cirrohosis liver and other liver diseases.
Balchaturbhadra	Bilva and Kutaj	Anti diarroheal and Antidysentry preparations.
Cough Syrups	Aurdusi, Jethimadh	Whooping cough & etc.Chronic - phneumonia
Teething trouble	Praval,Pistry, Modi Pisty, Shankh Bhasma, Sukhti Bhasma etc.	Teething trouble.
Anthelmenthics	Vidang,Indrajav, Karkaj, Kuberaksh.	Anthelmenthics.
Balchamcha, Balsogathi Balgutika preparations	Saffron,Khas-khas	Anti - diarroheal sedatives and other tonics general for the growth of the infants.
Local applications	Moti-harde	For external application in diptheria.
Bitter tonics	Kadu-kariyata, Arogyavardhini etc.	Tonics.

*Commissioner,Food and Drugs Control Administration, Gujarat State.

These are the few examples of most commonly used Ayurvedic preparations. Balchamchas which were earlier supplied as metal spoons are now discontinued due to presence of traces of lead in the metal of the spoon, now plastic spoons are supplied.

These drugs were earlier used in crude forms, as a result, these were difficult to be administered to the neonates because of the unpleasant taste. Now almost all the dosage forms in Ayurvedic systems are presently available.

Gujarat has 15 Circle Offices (i.e. almost one in each District) with one Assistant Commissioner, Senior Drugs Inspectors, Drugs Inspectors and subordinate staff for the control of quality of Ayurvedic drugs. A license in Form No. 25-D is required to be obtained for manufacturing of these drugs. The Joint Commissioner(Drugs) is empowered as Licensing Authority for such drugs and accords license after necessary verification of space, equipments, storage facilities provided by the applicant firm by Inspecting officer and after obtaining opinion from an expert in Ayurved known as Technical Officer(Ayu.). The expert has qualifications as laid down under Rule 154(2) of the above act.

The licensing procedure is simplified by clubbing various categories of drugs groupwise, for example powders includes Churna, Lep, Kavath Churna, Dantmanjan, etc. Tablets includes Gutika, Vatika, Madaka etc.. Ointments includes Pain Balm and other ointments for external applications, lotions and liniments. Oral Liquids includes Gripe Water, Kwath and other liquid oral preparations like Syrups etc. Asav comprise of all sorts of preparations made by fermentation, Bhatti Vibhag includes Bhasma, Avlcha, Ghruta, Taila, Parpati, Pottali, Kshar Lavan and Kupi-pakva Rasyan, etc. and Kharviya Rasayan includes all other Rasayans.

Accordingly, space is required and entrepreneurs are requested to approach for the approval of their plan showing necessary storage facilities for raw materials, finished products, packing materials, quarantine materials, manufacturing etc. The plans are examined by the Plan Committee consisting of senior officers, which on approval are being sent to the entrepreneur, who in turn, applies for license with necessary applications in prescribed proforma alongwith other documents such as Additional Information form, list of equipments, list of products, list of technical persons employed by them and other facilities provided. The application after its critical scrutiny is sent to a Senior Drugs Inspector(as having notified under section 33G having experience as Drugs Inspector for 4 to years and have been given training in reputed Ayurved manufacturing units for 30 days.

The permission for patent and proprietary medicines are granted only after verifying that such drugs contain only such ingredients having therapeutic value within such dose range as prescribed in the authoritative books specified in Schedule I to the Drugs and Cosmetics Act. Similarly, generic formulations are scrutinised as to whether these are in accordance with the formula prescribed in the authoritative books laid down in schedule I to the said Act.

The State has its own full-fledged testing laboratory for test and analysis of drugs and food articles wherein there is a special separate Pharmacognosy Division for test and analysis of Ayurvedic drugs. This laboratory has established the standards of 15 various formulations and raw materials. The samples drawn by the Senior Drugs Inspector's during the routine inspection are subjected to analysis for its purity at this laboratory. Since these are harmless medicines manufactured from the naturally available raw materials, however, in case of complaints, concerned Assistant Commissioner may be consulted so that the samples of drugs in question can be drawn for necessary test and analysis. Since there is no system of licensing for sale of such Ayur vedic drugs as in with the Allopathic drugs, there is a check system that any drugs sold in the market must be manufactured under the valid license.

PREVALENT TRADITIONAL HOME CARE PRACTICES OF PRE-NATAL, POST-NATAL AND INFANT CARE IN GUJARAT (A HOUSEWIFE'S PERSPECTIVE)

* SAROJ VERMA.

Institutional mother care during pregnancy and delivery is not older than 100 years. Even today the delivery of a large number of women particularly in the rural areas are performed by local Traditional Birth Attendants(TBA). Traditional methods, ways of caring for women during pregnancy and after delivery in homes, are unique and vary in different communities and regions. Between the 6th to 9th months during pregnancy and 4 months after delivery women usually get special nutrition, massage and bath, these prepare the body to fulfill the demands of child birth and return to normalcy after delivery. The main ingredients for special foods during pregnancy and lactation are dry ginger, fenugreek, cumin-seeds, anise seeds, bishopweed seed,poppy seeds, edible gum, batrisu, sesame, with wheat flour, bajara flour, ghee and molasses or jaggery. Common recipes are soup, syrup, sweet balls, etc. All these ingredients have medicinal value; addition of almonds, coconut, dry date, provide additional energy. All these are given with total contention and presumption that these prepare the pregnant lady for quick and safe delivery and also help to bring back the body parts to normalcy quickly after delivery. They also prevent after effects of delivery like stomach ache, body ache, and gastric trouble. They promote lactation too.

These are given in addition to daily routine meals. Some extra care is taken not to give food heavy for digestion as it may directly affect the child. Use of milk is highly advocated. A few precautions are also taken, e.g. lifting of heavy weights and strenuous and exhausting work is prohibited during pregnancy. If pregnancy is normal and without complications no rest is given. Rest is very much emphasised after delivery. In a few places a glass of liquor(alcohol) is given to the woman to ease labour.

Special massage, bath, fomentation etc. are regularly practiced daily for 6 weeks after delivery for gaining normal strength and restoration of energy. Cotton ear plugs are also used. After bath, fomentation is given by putting bishopweed seeds, dry garlic skin in hot dung with the assumption that it helps to balance hormonal changes. Fomentation is given to vaginal opening for uterine involution.

After bath an abdominal binder of thin soft old cloth is tied to restore its shape.

Breast feeding is universal, but the initial milk is not fed to the child and thrown away. Breast feeding is started at least 24 hours after birth. Initially boiled lukewarm water with honey is given.

The paste prepared by rubbing Myrobalon(Hareda), Belliric Myrobalon(Behda), Nut Meg (Jayfal), Bitallaban (Sanchal), Gall Nut (Mayfal), Turmeric (Haldar), Almond (Badam), Dry Date (Kharek) is given daily to the infant.

Water and top milk are given to the child after boiling with Capparic trifolia. These practices are widely accepted and are based on native wisdom, they have been in existence from time immemorable. They have not been systemati-

* DIRECTOR, GUJARAT STATE CRIME PREVENTION TRUST "Ashirwad" 9/B, Keshavnagar Society, Near. Subhash Bridge, AHMEDABAD- 380027.

cally documented and not been assessed in terms of their utility.

These practices are commonly observed with a view to achieve better outcome but there is lack of precision, they also depend upon the socio-economic background.

At a later stage one can develop the package of information for propagation of this knowledge scientifically.

TRADITIONAL PRACTICES IN NEONATAL CARE

H.W. Jani

Here I would like to quote some traditional practices and knowledge, pertaining to antenatal care and neonatal care in Gujarat tribal areas.

It has been a traditional practice of giving some liquid before breast feeding to newborn child. At some places diluted honey is given, at some places jaggery diluted in water is given and at some places, mixture of jaggery, dried ginger, pepper etc. are given. According to women in these villages eating less and drinking less water helps in easy delivery. According to them coconut, groundnut, banana, jaggery, ghee, curd and buttermilk are harmful during pregnancy. It is believed that food eaten directly fallson the foetus and kind of food mentioned above stick on the foetus.

The tribal people do not take much care of expectant mothers or nursing mothers. Expectant mother do hard labour in the fields or in the forests till last day. Even after delivery of the child,they start working within two or three days. Usually it takes place at home, with the help of a local midwife. After cutting the umbilical cord usually they apply cowdung on it and thereafter they do not take care. In some villages instead of applying cowdung they apply cowdung ash.

Delivery takes place in sitting position; and a practice prevails in some tribal villages that an elder male member of the in-laws family remains present to help in the process of delivery. In many places delivery takes place in dark room where sunlight does not enter and both mother and child are kept in the dark room for 20 days to a month. Among some upper castes there is a custom that men do not see face of a nursing mother for 21 days after delivery. After delivery nursing mothers are given dill seeds to eat frequently in most of the places, which is supposed to produce more milk for the newborn. In some places decoction of dill seeds and jaggery is given for the same purpose.

During pregnancy from 7th month Asario and ghee and bhaji prepared from dodi are given for the same purpose. In many tribal houses a bamboo basket was found hanging in front of the house which is used as cradle. Babies upto a month are kept with the mother when she is at home. Some people have knowledge to judge from the face or from the physical development of the pregnant women that she will deliver a boy or a girl. A practice of performing puja of tree for getting a son is prevailing in some parts of Gujarat.

Among methods for prevention of evil looks and guarding thehealth of children are making children wear amulet, nails of tiger in the neck or small black and yellow beads on the wrist, making black spot on the face of the child with kajal etc. A variety of remedial methods are prevailing in different places. They are (a) burning dry chillies after moving it round the child. It is believed that if the child is affected chillies would burn without smell;
(b) putting a piece of alum on fire after moving around the child. It is believed that it will form the shape of the persons whose evil look has affected the child. (c) A jug full of water is placed in a plate. It is understood that the child is affected if the jug gets stuck to the plate.

* Activity & Training Coordinator.
Narottam Lalbhai Rural Development Fund.

If the child suddenly stops eating some food, that food is moved around the child and thrown at junction of roads. It is believed that after doing this,the child would start eating food.

Usually we observe pediatricians worried about and talking about milk foods and importance of breast feeding. In Khedbrahma taluka among most of the people we have found that weaning is a problem. Breast feeding is done till 3 to 4 years of age; which causes malnutrition among children.

TRADITIONAL PRACTICES OF NEONATAL CARE AMONGST TRIBAL COMMUNITY OF GUJARAT.

Harshida Dave

In traditional villages and the tribal society there have always been such categories of indigenous healers as the herbalist, the bone-setter, the faith healer and the 'hillot'. The latter usually confines her activities to attendance at birth and to the care of the newborn infant. Her services vary but often include offering such assistance with household chores as is traditionally demanded by good neighborly practice in the village. It is largely through maintaining this combination of services to the mother, the child and the household that the hillot has survived and continues to be accepted by local community to the day even though modern health care has become somewhat available to the rural and tribal population.

Unfortunately the hillot's practices have time and again contributed to maternal and infant morbidity and mortality. She performs few manipulations during child birth, the newborn is passively received under cover of clothes to conceal the mother's private parts. Although some complaints in the mother may result in failure at applying manual pressure on the fundus of the uterus to facilitate expulsion of the fetus, causing subsequent rupture. In case of a newborn child, errors of commission are frequent. It is common for umbilical cord to be cut with a non sterilized knife or pair of scissors or bamboo blade and the application of some powder, chopped tobacco leaves or even dried horse manure on the cord dressing. Practices of this nature are responsible for the high incidence of tetanus of the newborn. The dai receives neither compensation, honorarium nor daily wage for her services. The remuneration she receives from the mother may be in the form of a gift or sometimes in cash but more often her services amount to simple acts of goodwill and good neighborliness.

* (Research Officer), Gujarat Vidyapith, Ahmedabad.

Some important traditional practices in this context are summarised below :-

Fever in a pregnant woman : For treating the fever first of all gulkand should be given with water for relieving constipation, if it does not act one or two spoonful of caster oil may be given with milk. Food and digestion must be regulated. Ordinarily fever is cured by such treatment.

Difficult Childbirth : i) If there is some difficulty in the birth of the child 1 gram pure saffron is ground in 50 grams of Keora water and given to drink. Child birth will be facilitated. ii) 10 grams of the rind of the fruit of purging cassia(amaltas) and 10 grams of the capsule of cotton plants with 20 grams of jaggery are boiled in water and given to drink, child birth is thus made easy.

iii) If the child is dead inside the womb the cast skin of a snake is burnt and the smoke introduced into the vagina. The dead foetus will be ejected. iv) Bitter luffa(Karvi Torai) is ground alongwith its seeds and a piece of muslin or cotton wool merged with it and placed inside the vagina. The uterus will move and eject the dead foetus.

Neonatal care : Sad to say little attention is paid to the arrangements necessary for the safety of the child. Generally the mother is held responsible for the welfare of the child, while at that time she herself requires attention. Villagers and tribals

ue to their ignorance do not care for their safety vhich is the cause of much infant mortality. In ribal villages the idea prevails that confinement s something filthy and a dark room is selected for the purpose which produces adverse effects on the health of both mother and child.

Labour practices : At the time of child birth women flock to the place of child birth. Ignorant midwives take false labour for genuine and begin measures for child birth endangering both mother and the child. The remedy is to give castor oil 30 grams in luke warm milk, if urine is held back to give milk with water. Sometimes it so happens that the head of the child comes out but rest of the body is held back. In such a case ignorant midwives try to pull out the child irregularly but by doing so the cervical vertebrae are displaced and the child dies.

Newborn who does not cry at birth : It is recommended that when the child is born the midwife should first of all insert her finger in the mouth of the baby and clean it. The baby cries at the time of cleaning which is the welcome sign of the life and soundness of baby for the mother and other relatives, but if the child does not cry cold water should be dashed at its face so that it may gasp and cry. Should this not help, the baby should be dipped in a tub of cold water and taken out at once, now it will gasp and cry. But if even this fails the following measures should be taken :-

'The baby should be laid flat on its back with the shoulders resting a little higher than the rest of the body and the head lower. Now taking hold of the arms of the baby by the elbows draw them straight towards the head and blow into the mouth of the baby. Then bringing the arms down, press them on the breast so that by pressure of the arms the air expels from the lungs. Raising the arms, blowing into the mouth, bringing the arms down and pressing the air should be repeated for an hour or two at the rate of 18 times an hour. If the baby begins to breathe and cry it is well, if not it should be taken as dead'.

Immediate neonatal care :

i) Cutting cord :- In tribal areas some ignorant midwives do not care for sterilization and use gut for tying knots on the cord and blunt knife, bamboo blade, ordinary blade or sickle for cutting the cord. Such a practice leads to entry of poison in the body of the baby who suffers from tetanus and its life is put in danger.

ii) Stool :- Generally two or three hours after birth the baby passes loose stool which is very good, But if it does not, a purgative (gutti) should be administered or 3 grams of castor oil mixed with 2 grams of pure honey should be given to lick.

iii) Feeding :- Generally the infant is put to the breast after two or three days. This is not proper. Usually after 12 hours of the child birth the mother feels tension in her breast, if the baby is not put to the breast for 36 hours the mother feels uncomfortable on account of this tension. Sometimes she gets fever. Therefore the baby should be put to the breast, 12 hours after child birth.

Postnatal maternal feeding : In some areas sometimes mother is not given any food or she is kept without food and sometimes porridge made from boiled jaggery and flour but without ghee is given. At some places gruel is also given. In tribal societies, there is superstition about milk. Milk is not given to the parturating mothers. Mostly there is a custom that mother should be given some kind of sweet preparation made from wheat flour.

Neonatal care in the tribal communities of Gujarat is not on hygienic line. Sometimes it so happens that the tribal women go on working hard in the last days of pregnancy. Many a times the delivery occurs right in the field or on village path. Soon after the child birth the woman starts working in

the farm. On account of this health condition of the tribal women is hazardous and sometimes this proves to be dangerous. The tribal women are made to suffer because of the following reasons :-

Poverty, lack of proper knowledge, fear, superstitions, non-availability of primary health centres within easy access, unable to get Vitamins, minerals and proteins, hesitate to consult medical personnel, not serious about immunization etc.

Maternity services in tribal areas are still not adequate. Their age old traditions often make a trained dai or a midwife unacceptable to the tribal women. In case of the death of the infant there is a belief that unseen evil spirits or witches have been the reason of death of the child. They believe that if the evil spirits are not properly propagated, their anger results in the death of the child. In certain cases where the help of the midwife has been taken but the delivery has not proved successful, the midwife is blamed and the tribals then stop taking the assistance of the midwife later. Traditional birth attendants are the only agents of health care of the tribal women. The majority of the tribal women prefer the traditional healer whom they know and trust.

It is suggested that there should be a course to train a large numbers of tribal women in modern neonatal care. Educated tribal women should be used to work as change agents among their own sisters who are still tradition-oriented. This will go a long way in making modern neonatal practices popular among tribal women and therefore will greatly help in reducing he infant mortality rate in tribal areas and also in the prevention of the tribal women dying immaturely at the time of child birth.

A PSYCHOLOGICAL VIEW ON TRADITIONAL PRACTICES IN NEONATAL CARE.

* Ratna Bilwani

Mothers and fathers have been raising children more or less successfully for thousands of years on the basis of guidelines of health practices. Some of these are useful and can be correlated with scientific facts , Others are simply superstitions. Some are related to physical well being and others are for emotional support and provide a sense of satisfaction. Psychological correlates of some of these practices related to emotional needs of mother's and the baby's development are presented here.

Traditionally speaking a woman is not complete till she bears a child. The first pregnancy has the special significance. A shy mother may not declare the pregnancy herself. It is at this time her likes and dislikes for different food is entertained and she is made to feel important for having conceived. It gives her a sense of happiness that is very important for her emotional well being. There are many worries at this time in the mind of the would be mother regarding the health and perfectness of the baby, and the sex of her "dream child". Other worries are related to her own body disfigurement , weight gain, labour pains, future adjustment in the family etc. Traditionally the mother's emotional well being is taken care of by advises like 'not to worry", putting a photo of a beautiful baby in the mother's room , prayers for baby's well being, avoiding certain hazardous activities and so on.

By end of 7th month, the custom of "gode bharna" serves the purpose of providing emotional support to the mother. A gathering of experienced ladies collected on the occasion advice the mother regarding her daily activity, labour events, baby's care and often share their own experiences. These events help the mother to relieve some of her fears and anxieties.

Prediction of sex of baby by signs like a vertical or horizontal bulging abdomen, position of umbilicus, gait of the mother and her inclination to activity are very common. Traditional preference for the male child leads to maternal fear and anxiety of having a girl child. There are no fixed rules of prediction but such traditions make the mother apprehensive, they may resort to fasting and praying on their own. The practice of sending the pregnant lady to her parents for last part of pregnancy and delivery is a help to her. She feels more at ease with her own people who care for her more and share the burden and joy of the new arrival.

Post natal isolation of the baby and mother helps in keeping them comfortable in the initial period. Apart from preventing infections , it gives more time for maternal-infant bonding. Practice of tying the baby and use of cradle gives the baby an opportunity to gradually grow up from the secure state. The mother also gets enough time to regain health and fulfill the baby's needs. In terms of long term effects , early intimacy with the mother , and warmth and security provided by the mother makes the foundation for a secure and trusting personality. The importance of breast feeding has been emphasised enough (in terms of its physical qualities) but of special significance is the development of emotional bond between the mother and the baby during nursing. Eye to eye contact with the mother , cuddling, fondling, lullabies, hugging which are commonly done by tradi-

* Dr. Ratna Bilwani. MD (Psych.) Child Psychiatrist, B.J.Medical College, Ahmedabad.

tional mothers are of great impact in this context.

Warmth and affection showeredon the baby (cuddling and playing) does more than mere expression of love. Well stimulated babies become alert and gain weight earlier, and neurologic development is hastened. Lack of loving stimulation in institutionalised babies is thought to be responsible for disabilities in emotional and cognitive development at the later stage. The traditional baby massage and bath also result in good sensory stimulation , apart from their advantages regarding developments of skills and muscle tone. Massage done unwillingly , hurriedly by a tense, angry individual without establishing warmth may disturb the infant more than helping it. It has been proved that even a new born baby can perceive the emotional state of the person handling it. Other useful traditional practices are those of arranging toys and tying bright coloured hangings around the baby. This provides visual , auditory and kinesthetic stimulation . Talking , babbling, cooing with the baby at an early age (when lay people feel that the baby does not understand any emotion) are beneficial in the context of development of the infant. Poor stimulation during the periods of early development may result in defective language skills and may contribute to subsequent scholastic difficulties. It has been found that the lack of stimulation leads to disabilities in emotional and cognitive development of child.

Many of our traditional practices have been inherited by rich psychologically relaxing experiences.But sane practices and beliefs may not be beneficial. The traditional preference for the boy has led to a strong sex bias against the "girl child". Often the mother is made to feel guilty for having given birth to a girl. Such negative feelings may affect the mother's attitude towards the child in the later years, significantly influencing the child's future development. Traditional practices do not emphasise the much needed role of father as caretaker during pregnancy, delivery and in the care of the newborn. With the progress of the behavioral sciences we now know the temperamentaldifferences in different newborns. Majority of the babies are normal and easy to handle but few babies are quieter and take more time to "warm up" . Some babies become irritable on stimulation. The individual needs of infants born premature or with birth trauma have not been considered . Giving routine traditional care to these babies (in need of specialised care) can prove hazardous.

NEONATOLOGY AND HOMEOPATHY

Dr. Bhaskar Bhatt

A sharp rise in awareness regarding health education and desire of parents to provide better life to their children is now a days an important factor for rise in demand for medical attendance to neonates. In homeopathy, neonatal period extends from birth to 28th day of life. This demarcation may vary with an individual neonate. Basically three important etiological factors should be considered while examining a neonate. They are i) Heredity, ii) Environment in Utero and iii) Conditions of life after birth.

Homeopathy is a branch of medical systems which treats the patient and not the disease. When any patient, be it a neonate or an adult comes for Homeopathic treatment, he is treated for whole of him i.e. his constitution, his immune system, his general condition and his disease. The neonates treated with Homeopathic constitutional remedies tend to have higher immunity in later period of life and as a result of better resistive power, will face lesser amount of problems compared to the ones having suppressions of the immune systems.

1. Heredity : Heredity is not considered for congenital anomalies or genetically transmitted diseases only. Any physical or mental illness is serious enough to disturb the patients health to such an extent that it may carry a taint to the next generation where it will hamper the susceptibility of an unborn child. Suppose a neonate's grand parents had died of tuberculosis longback before the conception, then recurrent cold, cough or allergic bronchitis or constitutional weakness may occur in such a neonate. Because of the genetic taint which has been carried to the 3rd generation the problems faced by the neonate at present has roots in the problems faced by the grandparents, and are the reason of the disturbed susceptibility of the neonate. Family history of recurrent abortions, allergic conditions, metabolic disorders, malignancies, CVS & CNS diseases, psychic disorders like depressions or schizophrenia, skin disorders and infectious diseases are few of them which are considered vital for Homeopathic prescription.

2. Environment in Utero : Apart from lack of nutrition, state of mind, any illness and medication during gestation should be given due importance while examining a neonate. Sudden fear and emotional disturbances of mother should never be neglected.

3. Conditions of life after birth : Nutrition, weather changes and environmental changes are the important factors. Certain important etiological aspects should be elicited, like 1) home or hospital delivery; 2) mode of delivery; 3) baby's immediate cry after birth; 4) preterm or full term baby; 5) Under weight or overweight baby and 6) breast feeding or bottle feeding. Keeping all these etiological factors in mind we discuss here the various complaints of the neonates with the probable causes and the probably indicated remedies.

DHMS, Ahmedabad.

COMPLAINT	CAUSE	REMEDY
1. Excessive crying.	1. Colic	1. CHAM,MAG PHOS, COLOCYNTH
	2. Fungus infection of ear with otitis media.	2. CHAM,BELL, MERC SOL.
	3. Common cold and nose blocking	3. SAMBUCUS , ACON FERR PHOS.
	4. Cerebral irritability.	4. ACONITE , BELL CHAM etc.
	5. Insect bite.	5. LEDUM, APIS.
	6. Hypocalcemia.	6. CAL CARB, CAL PHOS.
	7. Trauma.	7. ARNICA.
2 Vomiting	1. Infection.	1. ARS ALB, ANTI TART, IPECAC, NUX VOM etc.
	2. CNS cause.	2. CUPRUM MET , IPECAC, NUX VOM
	3. Surgical condions such as congenital pyloric stenosis	3. Surgeons opinion is required and the INDICATED Homoepathic remedy should be given. The quantity,frequency and quality of vomiting and associated symptoms guide to a remedy.
	4. Improper feeding.	4.Advise to correct the feeding method.

3. Diarrhoea:-

4 to 5 semisolid stools are considered normal in neonates. Greenish coloured meconium passes within first 24 hours and it continues for three days. On the 4th and 5th day stools are greenish yellow. 6th day onwards they are yellowish in colour. Because of the strong gastro-colic reflex, baby passes the stool during or immediately after feeding. Bottle feeding menaces diarrhoea and one should inquire why breast feeding has not been given ? Mother can be treated for deficient milk or to improve the quality of milk.

1. Allergy to mother's milk	1.MAG CARB,SILICEA CAL CARB etc.
2. Infection.	2.CHAM, NUX VOM,

COMPLAINT	CAUSE	REMEDY
		PODOPHYLLUM, MAG CARB, CAL CARB, MERC SOL, RHEUM as per the frequency,consistancy and quantity of stool.
	3. Over feeding.	3.Advise for proper feeding.
4. Constipation :-	Some babies have tendency to pass stool once in two days or three days. If there is no associated problem, they should be left untreated.	
	1. Powder milk preperation or cow's milk.	1.MAG MUR,NAT MUR MUR , SILICEA, CAL CARB etc.
	2. Anorectal abnormalities.	2.Advise to seek surgeon's opinion
5. Common cold	1. Viral infection.	1.ACONITE , FERR PHOS, SAMBUCUS, NAT MUR etc.
	2. Syphilitic nasal problems	2.SYPHILINUM one dose and advice of plastic surgeon.
6. Fever	1. Sepsis (Home delivery)	1. PYROGEN,ARNICA etc.
	2. Minor infection viral or bacterial.	2. ACONITE, BELLADONA , FERR PHOS, ARS ALB, GELSIMIUM etc.
	3. Heat(Excessive)	3. BELLADONA, NAT MUR, NAT CARB, GLONINE advice to keep the child in cool place.
	4. Bacterial, viral or fungal infection, allergic dermatitis.	4. Wide range of remedies.
7. Cough	Cough reflex is not well developed in premature babies so they are likely to aspirate while feeding which may lead to lung infectin. Such babies	

COMPLAINT	CAUSE	REMEDY
	need TUBERCULINUM.	
	1. Infection of upper respiratory tract.	1.ACONITE, FERR, PHOS, BELLADONA etc.
	2. Stridor, rattling cough.	2.ANTI TART,IPECAC CUPRUM MET ,BLATTA etc.
8. Colic	1. Hunger swallowed air (Improper (feeding).	1. Advice to correct the feeding method.
	2. due to certain carbohydrates.	2. CHAM, COLOCYNTH MAG PHOS.
	Bottled fed babies suffer from infectin. Apart from that they suffer from sense of insecurity and unfamiliar environment. Though the mental arena is not fully developed, the psycosomatic reflex lead to colic and other problems. Such neonate need MAG CARB, RHEUM, CHAM, CINA, BRYONIA, RS ALB and other indicated remedies.	
9. Convulsions :-		
	Tonic spasms may be followed by clonic jerks. Various etiological factors like, asphyxia, cerebral contusion,hypoglycemia, hypocalcemia, hypo or hyper natremia, hyper-bilirubinemia, bacterial or viral meningitis, certain drugs, vitamin - B deficiency, and family tendencies may cause seizures. Time, frequency, associated symptoms, general constitution, and family history, guide to prescribe. The remedies indicated in such conditions are CUPRUM MET, NUX VOMICA, OPIUM, CINA, CICUTA, BUFO, TUBERCULINUM etc.	
10. Skin Disorders :-		
	1. Milia, small papules of pearly white or pale yellow colour. Commonly seen on face and forehead.	1. No treatment is is required.
	2. Traumatic lesions	2. ARNICA.
	3. Vascular disorders like	3. No treatment.

OMPLAINT	CAUSE	REMEDY
	haemangioma or lymphangioma.	
	4. Bacterial, viral or fungal infection, allergic dermatitis.	4. Wide range of remedies.

Homoeopathy has a more scientific aproach to treatment in relation to cause factors for a diseases, but it is not possible to cover all those in this paper. As a thumb rule **skin lesions should not be treated with external applications.**

Some serious surgical problems faced by neonates are not discussed here as they are beyond the scope of conventional treatment.

Section – VI

SPECIAL THANKS ARE DUE TO :

* NNF for giving us the opportunity to conduct this impportant workshop.

* GOI for giving the financial grants.

* UNICEF for supporting the workshop and mainly the data collection.

* The Dean, Dr. C. A. Desai for allowing us to conduct this workshop.

* Srimati Elaben Bhatt for inaugration and guidance.

* Dr. P. M. Shah for acepting our invitation within a short notice and encouraging and appreciating our effort and proving valuable guidance.

* Dr. T. B. Patel for presiding over the function.

* Lok Swasthya Parampara Samwardhak Samithy for giving us help in more than one way, deputing participants to the workshop, displaying exhibition material and providing slide show etc.

* Dr. Meharban Singh, President of NNF 1989-90 and Dr. D. K. Guja President of NNF 1990-91, for their prompt critical comments and guidance in formulating the final recommendations.

* Dr. Sudarshan Kumari and Dr. V. K. Paul for their active support.

* Dr. S. K. Bhargava for valuable suggestions

* Dr. Mahesh Sharma for editorial assistance in preparing this report including review of literature.

* Dr. Madhulika Kabra for assistance in review of literature and data analysis.

* Dr. J. R. Gohil, our treasurer for an excellent management of accounts.

* Dr. Ashish Sood and Dr. Rakesh Sharma for good photographs.

* Ahmedabad Branch and Gujarat State Branch of I. A. P. for supporting us from the beginning.

* Gujarat Chapter of Indian Association for advancement of medical education for helping us in organising.

* Dr. N. L. Patel, Director of Cancer Research Institute for providing us various facilities.

* All the participants for taking such keen and active interest in theproceedings.

* Last, but not the least, all our colleagues, residents and office staff, but for whose co-operation this workshop could not be conducted so well.

LIST OF PARTICIPANTS OF WORKSHOP ON TRADITIONAL PRACTICES OF NEONATAL CARE IN INDIA ON 19-20 JANUARY 1991

1. Dr. P. M. Shah, Medial Officer, MCH, WHO Geneva (Switzerland).
2. Dr. (Mrs.) A. B. Desai, Past President IAP, Ex-Director of Postgraduate studies & Research, B. J. Medical College, Ahmedabad.
3. Dr. Sudarshan Kumari, Associate Professor of Pediatrics, Kalavati Saran Children Hospital, New Delhi.
4. Dr. (Mrs.) S. N. Vani, Professor and Head of the Deptt., Pediatrics, B. J. Medical College, Ahmedabad.
5. Dr. Ibetombi Devi, Professor of Pediatrics, Medical College, Manipur Imphal.
6. Dr. Sunderlal, Professor and Head of P. S. M. Deptt., Medical College, Rohatak, Haryana.
7. Dr. V. K. Paul, Asso. Professor of Pediatrics, AIIMS, New Delhi.
8. Dr. Sharad Aiyangar, UNFPA Project, Shimla.
9. Sri Balasubramaniam A. V., LSPSS, Madras. (Lok Swasthya Parampara Samasardhan Samithy).
10. Dr. Mandowara, Associate Professor of Pediatrics, Medical College, Udaipur.
11. Dr. Mukesh Gupta, Associate Professor of Pediatrics, Sampurnanand Medical College, Jodhpur.
12. Dr. Sailee, Associate Professor of Pediatrics, Kalawati Saran Children Hospital, New Delhi.
13. Dr. M. J. Mehta, Hon. Professor of Pediatrics, Civil Hospital, Ahmedabad.
14. Dr. Arun Phatak, Senior Pediatrician, Children Hospital, Baroda.
15. Vd. Ila Deshpande, Akhandanand Ayurvedic College, Ahmedabad.
16. Vd. Durga Paranjpe, Pune.
17. Dr. (Mrs.) A. A. Shah, Associate Professor of Pediatrics, Medical College, Ahmedabad.
18. Dr. Prabha Tandon, Senior Research Officer, Obst. & Gynec., Medical College, Lucknow.
19. Dr. (Mrs.) A. G. Momin, Associate Professor of Pediatrics, B. J. Medical College, Ahmedabad.
20. Dr. (Mrs.) P. R. Shah, Assistant Professor of Pediatrics, B. J. Medical College, Ahmedabad.
21. Dr. Ratna Bilwani, Hon. Asso. Professor of Psychiatry, Civil Hospital Ahmedabad.
22. Dr. (Mrs.) N. D. Yagnik, Professor of Obst. & Gynec., B. J. Medical College, Ahmedabad.
23. Dr. (Ms.) L. B. Trivedi, Professor and Head Obst. & Gynec., B. J. Medical College Ahmedabad.
24. Dr. J. R. Gohil, Assistant Professor of Pediatrics, B. J. Medical College, Ahmedabad.
25. Dr. Neelam Raval, Assistant Professor of Pediatrics, B. J. Medical College, Ahmedabad.
26. Dr. Mahesh Sharma, Assistant Professor of Pediatrics, PP Unit, Civil Hospital, Ahmedabad.
27. Dr. Madhulika Kabra, Pool Officer, Pediatrics deptt., Civil Hospital, Ahmedabad.
28. Dr. Susheel Kabra, Asstt. Professor of Pediatrics, V. S. Hospital, Ahmedabad.
29. Vd. Jyotsana Rawal, Sr. Research Officer, ICMR Project, Civil Hospital, Ahmedabad.
30. Dr. Suresh Patel, Principal, Homeopathic College and Research Centre, Anand.
31. Dr. Shobha Shah, Obstetricial SEWA - RURAL, Zagadia.
32. Shri Harshwardhan Jani, Activity & Training Co-ordinator, NLRDF, Ahmedabad.
33. Dr. Kanta Seth, Senior Lecturer, NCERT, New Delhi.
34. Dr. Saroj Verma, Co-ordinator, Crime Prevention Trust, Ahmedabad.
    (Middle Level Workers' Training Centre)
35. Dr. Solanki, Tribal Research & Training Institute, Guj. Vidyapeeth, Ahmedabad.
36. Dr. Rekhaben Joshi, Supervisor (ICDS-Anganwadi), NLRDF, Ahmedabad.
37. Ms. Nita R. Patel, LGRDF, Ahmedabad.
38. Ms. Ami Patel, Ahmedabad Women's Study Action Group, Ahmedabad.

9. Vanita Damor, AWAG, Ahmedabad.
0. Vd. Smita Bajpai, CHETNA, Ahmedabad.
1. Nimitta Bhatt, Gujarat Voluntary Health Association, Baroda.
2. Harshida Dave, Research Officer, Tribal Research & Training Institute, Gujarat Vidyapeeth, Ahmedabad.
3. Dr. Pandya, Tribal Research & Training Institute, Gujarat Vidyapeeth, Ahmedabad.
4. Dr. Masavi, Tribal Research & Training Institute, Gujarat Vidyapeeth, Ahmedabad.
5. Dr. M. A. Patel, Commissioner, Controller of Food & Drugs, Govt. of Gujarat, Gandhinagar.
6. Dr. Kasture, Director, Ayurveda, Faculty, Govt. of Gujarat, Gandhinagar.
7. Sri N. Rangaswamy, Programme Officer, UNICEF, Gandhinagar.
8. Dr. (Miss) P. A. Panchal, PHC Bavla.
9. Dr. Rajesh Mehta, Associate Professor of P & S. M., P. S. Medical CollegeM. O. Karamsad, Gujarat
0. Ms. Leela Visaria, Gujarat Institute of Area Planning, Gota, Ahmedabad.
1. Dr. Vipul M. Turakhia, Pediatrician, Ahmedabad.
2. Dr. Nitin Doshi, Pediatrician, Surendranagar.
3. Dr. Jitendra Bafna, Pediatrician, Udaipur.
4. Dr. Lajvanti Sajanani, Pediatrician, Ahmedabad.
5. Dr. Punam Sharma, Pediatric Resident Medical College, Gwalior.
6. Dr. P. K. Asudani, Pediatrician, Civil Hopital, Kheda.
7. Dr. Bharat Pandya, Govt. General Hospital, Navsari.
8. Mr. B. B. Patel, AIR, Ahmedabad.
9. Mr. P. V. Kadia, AIR, Ahmedabad.
0. Mr. B. S. Buch, AIR, Ahmedabad.
1. Dr. R. K. Desai, Senior Practitioner of Homeopathic Medicine, Ahmedabad.
2. Dr. Bhaskar Bhatt, Secretary, Gujarat Branch of Homeopathic Practitioners Association of India.
3. Dr. Jaswant Singh Rathod, Tribal Research & Training Institute, Gujarat Vidyapeeth, Ahmedabad.
4. Dr. Uma Nayak, Asst. Professor of Pediatrics, Medical College, Baroda.
5. Dr. Shila Aiyer, Asst. Professor of Pediatrics, Medical Colege, Baroda.
6. Dr. Urmila Prasad, PHN, Health & Family Welfare Dept., Ahmedabad.
7. Dr. N. K. Bellany, Dy. Director MCH EPI, Govt. of Gujarat, Gandhinagar.
8. Mrs. B. V. Vyas, PHN, Ahmedabdad.
9. Dr. Sunil Bhatt, Senior Research Officer, ICMR, Project on Comprehensive MCH Care, Medical College, Gwalior
0. Dr. Mani Ratan, Chakraborty B. J. Medical College, Ahmedabad.
1. Dr. Rupal Jeswani, B. J. Medical College, Ahmedabad.
2. Dr. Naik N. G. B. J. Medical College, Ahmedabad.
3. Dr. Lalit Rathod B. J. Medical College, Ahmedabad.
4. Dr. Ashish Sood B. J. Medical College, Ahmedabad.
5. Dr. M. S. Sheikh B. J. Medical College, Ahmedabad.
6. Dr. Darshan Shah B. J. Medical College, Ahmedabad.
7. Dr. T. Raja B. J. Medical College, Ahmedabad.
8. Dr. Praful Naik B. J. Medical College, Ahmedabad.

79. Dr. Swati Goswami B. J. Medical College, Ahmedabad.
80. Dr. Praful Patel B. J. Medical College, Ahmedabad.
81. Dr. Margi Bankar B. J. Medical College, Ahmedabad.
82. Dr. Meera Varahat B. J. Medical College, Ahmedabad.
83. Dr. Shashtri D. D. B. J. Medical College, Ahmedabad.
84. Dr. Yagnesh Popat B. J. Medical College, Ahmedabad.
85. Dr. Snehal Parekh B. J. Medical College, Ahmedabad.
86. Dr. Shailesh Garg B. J. Medical College, Ahmedabad.
87. Dr. Suparna Rao B. J. Medical College, Ahmedabad.
88. Dr. Nimisha Mehta B. J. Medical College, Ahmedabad.
89. Dr. Parag Parekh B. J. Medical College, Ahmedabad.
90. Dr. Rekha Patel B. J. Medical College, Ahmedabad.
91. Dr. Sanjay Chatree B. J. Medical College, Ahmedabad.
92. Dr. Shrinil Gandhi B. J. Medical College, Ahmedabad.
93. Dr. Bela Shah B. J. Medical College, Ahmedabad.
94. Dr. Prakash Jethawa B. J. Medical College, Ahmedabad.
95. Dr. Thomas John B. J. Medical College, Ahmedabad.
96. Dr. Umesh Shah B. J. Medical College, Ahmedabad.
97. Dr. Arun Pancholi B. J. Medical College, Ahmedabad.
98. Dr. P. L. Jani B. J. Medical College, Ahmedabad.
99. Dr. Pushpa Lal B. J. Medical College, Ahmedabad.

CARE OF THE NEWBORN IN MODERN SYSTEM OF MEDICINE

Dr. Meharban Singh

The new born baby constitutes the foundation of life. It is therefore, essential that a baby is born mature and healthy and grows optimally to become a strong adult. The average birth weight of a newborn baby in India is around 2.8 Kg (6.2 pounds). About 90 percent babeis are born after full term while 10 percent babeis are prematurely delivered (born before 37 weeks of gestation). Due to high incidence of maternal ill health, frequent pregnancies and under nutrition, around 30 to 50 percent babies in our country are low birth weight (birth weight less than 2500 gm). The healthy term baby can be effectively managed by health worker. The management of these babies do not need any sophisticated knowledge or technology and they can be satisfactorily managed by a commonsense type of approach.

BASIC ANTENATAL CARE

The health of the baby depends upon the health, nutrition and antenatal care of the mother. During first trimester of pregnancy the mother should strictly avoid taking any medications as a safeguard against the development of congenital malformations. The pregnant woman should be advised to take adequate nutrition (25% additional caloric intake) including supplements of iron and folic acid during atleast 4 to 5 months of pregnancy. She should take plenty of fresh green vegetables, pulses, seasonal fruits, milk and milk products and consume additional 25g proteins per day as compared to pre-pregnancy state. The widespread belief that excessive intake of food during pregnancy is associated with difficult delivery of a large baby is ill founded and must be discouraged. She must receive two doses of tetanus toxiid during pregnancy to develop protection against development of tetanus to her offspring. She must receive adequte rest and relaxation during last trimester of pregnancy so that calories and energy are conserved and expended for the growth of the fetus. She should be physically mentally and emotionally prepared during pregnancy to provide breast feeding as soon as the baby is born. The anatomical problems of cracked and retracted nipples should be managed during pregnancy so that there are no difficulties in breast feeding.

CARE OF THE BABY AT BRITH

The delivery should be conducted by a trained birth attendant preferably at a health post. The disposable sterile delivery kit should be used to prevent any hazard of occurrence of infection especially tetanus neonatorum. The delivery should be conducted in a warm, well ventilated and well illuminated room. Clean and sun dried clothes should be used while conducting the delivery. The oral cavity should be cleaned with a gauze piece or secretions sucked with the help of deLee suction trap. The baby with a weak cry or cyanosis can be stimulated by flicking at the soles or rubbing the back. Vigorous slapping and other traumatic means of stimulation such as throwing cold water on the face should be avoided. There is no role of any respiratory stumulants in resucitating a baby. The birth attendant should have the knowhow and skills to provide mouth-to-mouth breathing or mouth-to-mask breathing to babies who are unable to establish effective ventilation despite stimulation.

MAINTENANCE OF BODY TEMPERATURE

Most babies are likely to become cold at birth unless adequate precautions are taken aginst this hazard. The baby should be promptly dried and effectively clothed using a cap and mittens at brith. The baby bath should be delayed till next day when his temperature has stabilized. The linen and clothes of the baby can be pre-warmed on a "tawa" or in front of a heater. The room should be kept warm in winter with the help of a heater or "angeethi" taking due precautions against carbonmonoxibed poisoning. The baby should be nursed in close proximity to the mother so that the baby gains heat from maternal warmth. The oil massage is both culturally and scientifically acceptable as it provides insulation against heat and insensible water loss. The cultural practice of keeping the mother-baby dyad isolated for 40 days is useful and needs to be promoted. It prevents exposure of the baby to cold and safeguards aginst occurrence of infections.

PROMOTION OF BREAST FEEDING

The baby should be put straight to the breast as soon as the mother has recovered from the fatigue of labour. There is no need to administer any prelacteal feeds in the form of honey, glucose water, tea etc. The colostrum(milk secretion during the first three days of lactation) must NEVER be discarded and all babies should invariably receive it because it is rich both in energy as well as protective antibodies. The physiological inadequacy of Loctation during first three days of nursing should never be considered as an excuse for supplementing the feeding because it does not impose any hazards to a healthy newborn baby. The introduction of supplemental feeds during this period will lead to refusal on the part of the baby to suck on the breast resulting in delayed establishment of lactation and risk of infection. The mother must be explained and reassured that the act of sucking is the best stimulus for milk production and the small amount of concentrated milk produced during first two to three days of lactation is adequate to meet the nutritional needs of healthy normal babies. During first four months of life the baby should receive exclusive breast feeds and there is no need to give any water even during summer months because all the fluid requirements of the baby are met through milk. The child should be on demand feeding and most babies are satisfied with feeds taken every two to three hours. During first four to six weeks many babies need to be fed round-the-clock and after that gradually the night feeds can be reduced to one late night feed and one early morning feed. The regurgitation of feeds is often due to faulty technique of feeding and swallowing of air during sucking. The mother must be advised to burp the child after each feed to safeguard against the risk of regurgitation. During lactation the mother should be advised to take extra liquids and additional 50 percent calories in order to maintain her own health and nutrition.

SKIN CARE

The skin of the baby should be gently cleaned of blood, mucus and meconium at birth. The baby's skin is very delicate and covered with vernix (yellow caseous coating) at birth which should be removed gently over the next couple of days. The baby bath should be postponed to the next day or till body temperature is stabilized. The baby should be bathed in warm room using unmedicated soap and lukewarm water. The care should be taken to avoid dipping the umbilical stump in water. During summer months daily bath is recommended while in winter baby can be sponged daily or bathed after every 1-2 days. The mother and attendants must wash their hands with soap and water before touching the baby to prevent transmission of infection to the baby. The clothes should be soft, loose and in accordance with the weather.

CARE OF THE UMBILICAL STUMP

The umbilical cord must be cut with a sterile (autoclaved or boiled in water for 10minutes)

blade or knife and should be tied with a sterile thread, rubber band or disposable clamp. The cord should be left open without any dressing. The harmful practice of applying cow dung, oil turmeric etc. should be strictly avoided because they are a potential risk to cause tetanus in the baby. The tip of the cord and it base should be cleaned daily with a spirit of antiseptic solution. The cord usually falls after 5 to 10 days but may take longer if it has not been kept dried and free from infection.

CARE OF THE EYES

The eyes should be cleaned at birth and once daily using sterile cotton swab soaked in water or normal saline by using one swab for each eye. The cultural practice of instillation of human colostrum in the eyes has been found to be useful in reducing the incidence of sticky eyes. The practice of applying "kajal" in the eyes is not recommended because it may transmit infection like trachoma and may cause lead poisoning.

IMMUNIZATION

It is recommended to give BCG and first dose of oral polio vaccine as early as possible preferably within first week of life. The mother should be explained that the child should receive all the vaccines at proper time as recommended in the national immunization schedule.

EARLY IDENTIFICATION OF DISEASE

Most mothers do observe their babies carefully and are often worried by minor physical peculiarities and physiological problems which are of no consequence.She must be adequately informed and appropriately advised regarding minor problems to prevent undue anxiety, concern and worry. The health worker and mother should be conversant with the following danger signs which should be closely watched and brought to the attention of the physician for prompt management. Bleeding from any site, appearance of jaundice within 24 hours of age or deep jaundice, failure to pass meconium within 24 hours and urine within 48 hours, pensistent vomiting or diarrhoea, poor feeding, undue lethargy or excessive crying, excessive frothiness or choking or difficulty while feeding, respiratory difficulty and/or cyanosis, sudden rise or fall in body temperature, seizures and any evidence of superficial infection such as conjunctivitis, pustules, oral thrush umbilical sepsis etc.

PRINCIPLES OF NEONATAL CARE IN INDIAN SYSTEM OF MEDICINE

Dr. (Miss) Jyotsna Rawal

Health for all by end of this century is rather difficult unless each and every person is educated and they are made aware of health programmes, particularly every girl as she has to deal with child health from inception of pregnancy, during pregnancy, after delivery and neonatal care too. As far Ayurveda is concerned obstetrics and pediatrics are not separate subjects but both of them are included in the branch "Kaumarbhritya" in which neonatal care is given top priority, Maximum emphasis has been given on the physical and mental health of the child from the day it descends in the womb of the mother. Ayurveda has originally described methods for getting a desired child of the desired sex, intellect and prakriti (constitution) Various diseases of the children and thier treatment have also been described.

Neonatal care can be divided inot preventive measures and curative ones according to the view point of Ayurveda, that is aimed to describe in present paper.

Preventive Measures:

Immediately after birth of the baby, some methods of removing vernix caseosa from the body of neonate with rock salt and gharit is mentioned which is also acceptable in this era. Striking of stones, sprinkling over face of the child with hot or cold water according to seasons is also described for ragaining the life and make free from the trouble caused during coming out from maternal passage. Fanning with winnowing basket made of krishna-kapalika or with a blackened broken earthen pot to unconscious (asphyxiated) child for resuscitation is denoted, which are also practised in the villages to express their happiness, fulfils the above purpose, Striking of stones might have been advised to examine the condition of central nervous system which resembles to some extent with motor reflex. The practise of stimulating respiratory centre in asphyxia livida through skin reflexes produced by hot or cold water was prevalent in twentieth century too.

The method of cleaning the palate, lips, throat, tongue etc. are quite similar to allopathic views but covering of "Brahmarandhra" (anterior frontanelle) with cotton impregnated with indicated oil "Balatail" is not practised which is mentioned in Ayurvedic texts. In some houses, where some old lady is there they use. ghrit for this purpose. It gives tone to muscle and nervous system.

Medicated oil cut umbilical corel ghee or kustha tail should be applied to prevent infection and for quick healing.

Now a days fumigation is employed in big hospitals to keep the wards free from any infection. AyurvedaAyurveda has also indicated 'धूत' (fumigation) consisting of certain disinfectants like Guggulu, Lodhra, Ral, Devdar etc. particularly in labour room to keep the labour room, pregnant woman and neonate away from the diseases like tetnus, viral infections etc. A special chapter on भूतबाधा–ग्रहबाधा (In fective and viral diseases) is seen almost in every ancient Ayurvedic treatise, are भूत ग्रह synonyms to organisms and viruses that cause many serious diseases in neonates अभिवंग is used as synonym to infection of any kind. Dr. Nadkarni, writer of Indian materia medica has pointed out disinfectional properties in the said drugs when employed them for fumi-

gation purpose. To prevent infections, hanging of some drugs like khadira, pilu, sarso etc. tyeing of some antiseptic drugs like guggulu, garlic, sarso, vacha etc. in arms. legs head and neck of the neonate keeping of fire with the woods of thindukam nimb in labour rrom are described in Ayurvedic texts and are also applicable in this centurey to prevent infections. This entire rakshakarma is aimed at offering protection from infective disorders to mother and neonate. All the drugs indicated, are antibacterial or antiseptic, which might be either making the environment free from infective organisms or also reduce the virulence of these organisms.

Special rakshakarma is mentioned on 6th day night which might have been advised because the risk of tetanus to the neonate is maximum upto this period.

Body of neonate can be prepared healthy enough by creating immunity with the help of various methods according to Ayurvedic approach.

With Bath : From very first day of neonate for bath with luke-warm-decoction of Trifla(Harde, Baheda and Amla) or any disinfectant drug in very mild form can be employed. A combination of these three-fruits makes a physique healthy enough to prevent any disease caued by vat, pitta or kapha. The decoction for bath can be taken according to the doshas.

Massage : In Ayurveda अभ्यंग (Massage) has giits own importance. It makes the skin smooth-shiny and glowful. Massage is the original art of "Rubbing Better", of creating ease through onitary and all parts of the body. It is an extended form of touch, which developed with guidance and practise, will also give a greater knowledge and understanding of child. Massage is a constructive, nurturing response to a baby's inherent need for physical contact. During the early months of life, babies uncurl from their position and as they do so they stretch their muscles, open their joints and co-ordinate their movements. Massage is especially suited to these formative months as it provides a cohesive force that encourages to perform co-ordination and suppleness and helps prepare the nonate to perform co-ordinated physical skill and activities. Massage stimulates the circulatory and immune systems and benefits the heart rate, breathing and digestion. It provides a perfect balance and support to the development of the neonates as they co-ordinate and strengthen. It also cultivates the resilient elastic quality of the muscles and improves their ability to relax both in action and at rest. Massaging a baby regularly wile give the opportunity to keep a check and discover any areas of the body that consistently give rise to discomfort, pain or tension. Moreover, parents who develop their sense of touch and cultivate close physical contact with their child generate ease in their relationship right from the start and are able to soothe their child with far less difficulty. They remain, literally, "In touch" with their child and this encourages security, confidence and independence and reflects in the child's personality and in his or her relationships with others.

a medicated oil is known best for baby's massage. It is बला तैल nervine tonic. Massage is to be given before bath. Massage should be recommended in mothers and research project should be planned on this point in collobonation with both the systems, ISM and allopathy.

Exercise : In our villages old persons used to give light exercise to every organ of neonates when they are taken for bath and massage. That makes baby strong enough to prevent as well as to face any diseases. It creates flexibility and co-ordination of the muscles too.

Medicines : Medicines can be used for purpose of both prevention and cure. There are certain medicines that are indicated for prevention purpose in neonates. A few of them are cited here to explain their action in creating immunity in neonates.

Gold : The persons who can afford to use gold, should try the method of they (A piece of gold is scrubbed with a drop of water or milk for a while and put on the tongue of a neonate. That protects a neonate from every possible disease like tetanus, polio, mental retardation, respiratory disease, tuberclosis and many others. It is now well known to all that Japanese are using maximum gold in their food. So this method should be encouraged to create immunity from the begining in child. Amalaki Swaras (Juice of the fruit Amla). Fresh juice added with honey should be administered two to three times a day that creates immunity in neonate to face against any disease like T. B. etc.

Adarak Swaras (A juice of the Ginger)

Fresh juice added with honey can be given to neonate that keeps body away from any Kapha disease which is more dominent in neonate.

Vachachurn (Powder of Acorus Calamus)

It can be given in small dose with honey to keep the neonate away from the possibility of any neurological disorders as Vacha is nervine tonic, antiseptic and antibacterial.

Besides these some other drugs are also indicated under " Jatakarma" to produce and increase intellect longivity and strength आयु बल in child. These drugs are shankhapuspi, Brahmi, Ananta, Aindri, Shatavari, Dhatri, Bala etc. and should be given with honey and ghrita. This procedure of "Jatakarma" increases and creates immunity in the body and resistent power against the diseases in neonates. This prashan should be given first before any food on 1st, 2nd and 3rd day after birth. These drugs are nervine tonic, cardiac tonic, nutritive, galacto gogue, anti cough and diarrhoea, insecticide anti bacterial and antiseptics.

Certain medicines are described to treat the problems that develop in neonate. Due to lack of time we wil not discuss these curative drugs here.

Feeding of neonate :

There are some controversies in neonatal feeding. Some recommend first feed which is haveing colostrum to neonate and some opposit to first feed. In Ayurvedic texts feeding schedule and procedure of feeding is described in detail. Breast feeding is advised on very first day. But before giving breast milk, honey and ghitr indicated in "Jatakarma" should be given to neonate. Then right breast should be offered. gradually the time of the breast should be increased alongwith honey and ghriat and from 3rd evening free breast feeding should be given . Before giving first feed, breasts should beslightly squeezed or milk should be drained. Gentle squeezing of breasts before lactation ensures patency of lactiferous tubules and also avoids complications like vomiting, dyspnoea, cough, fever etc. which can be produced by breast milk if it is not drained. According to above explanation, it is clear that squeezing of milk is only for opening of tubules, which is essential. So first feed of breast milk should be encouraged in mothers. Pure breast milk provides unobstructed, easy and good growth and strength of different parts of body, longevity as well as good health to the child and gives satisfaction to child.

It creates close affection towards eachby them other which gives mental satisfaction to the child. Ancient acharyas have also mentioned the proper position for the feeding. It should also be recommended in society. They have also advocated cow's or goat milk when mother is unable to feed. The milk of cow or goat contains more protein and less carbohydrates. Therefore some medicines with sugar should be added in it. These medication might be reducing amount of protein and also converting it to more assimilable form. Sugar compensates for carbohydrate and will

make the milk more similar to human milk.

Weaning period is also mentioned in ancient times. After eruption of teeth gradual weaning should be done and light and anabolic cereals alongwith cow or goat milk should be given. It also supports the weaning period which is being practised in present time.

Summary:

Now a days Indian system of medicine has become popular in society and in many Asian and Europian countries. Russia has also started mobile dispensaries of Ayurveda recently. Thus ISM again takes its own place in world as system of medicine. Ayurveda is lacking so far as surgery and emergency drugs are concerned. However it can be employed **as supplementary and supportive system of medicine in case of neonatal care as it is freely employed in many day to day physical problems by majority of population.** Even so called highly educated and sophisticated persons prefer to use, innocent herbal drugs for their children as they are fully aware of side effects of some modern drugs. So according to views of writer, Ayurvedic system of medicine should be tried and employed in neonatal care too. Every neonate ward should be provided with services of modern as well as Ayurvedic specialists who can make joint efforts to give sound health to neonate and also can plan to treat any problems jointly. If we can think over above mentioned concepts and try to apply these methods in practise, we can promote the health of newborn as well as longivity, intellect and immunity and resistence power in child

Acknowledgement:

The author wishes to thank Dr.(Mrs.)S.N.Vani, Head of the paediatrics dep, B.J. Medical College, Ahmedabad and LSPSS, coorganizer for providing her a chance to mention her ideas and valuable comments and encourtagement for this work.

Bibliography:

1. Charak Samhita(Ch.s)
2. Sushruta Samhita(Su.5)
3. Ashtang Sangrah(Ast.5)
4. Kashyap Samhita(Ka.5)
5. Prasutitantra Vol.2 Prof. Premwati Tiwari
6. Indian Materia medica by Dr. Nadkarni
7. Indian Medicinal plants by ICMR.

Sanskrit References:

(१) अथ खलु श्नातमात्रमेव बालमुलबात् सैन्यवसर्पिषा मार्श्रयेत् ।
ततोस्यातिप्रबल मोहश्वरपीत सर्वमात्रस्य क्रोशितुमपि
रुश्नानुरुपममर्थस्यानवस्थिताशेषदेहधातोरसम्भाव्ययौवना द्यवस्थस्यक्रकचस्पर्शमेव
करवसनशयनसंसर्गमन्यमाम स्याविकलिपतङ्गानि विक्षिपत:
पुनरिवमरणमनुभवतो लीयमासंज्ञस्यातिसंबाधयोनिपुरावपीडित प्राणप्रत्यानयनाय
बलातैलेन परिषेकं कुर्यात् । कर्णमूले चाश्मनो संघट्टनम् ॥

अ. सं. ३.१–२–३

शीतोदकेनोष्णादेकेन वा मुखपरिषेक: तथा स कलेशविहतान् प्राणान् पुनर्लभेत् ।

च. शा. ट–४२

(२) प्रत्यागतप्राणस्य च प्रकृतिभूतस्य नाभिनालं नालाभिबन्धनाश्वतुरङ्गुस्यादर्वं क्षौमसूत्रेण बध्वा तीक्ष्णेन शस्त्रेण वर्धयेत् । ग्रीवायां चैनमासशूचेन् । नाभिं च कुष्ठतैलेन सेचयेत् ।।

अ. सा. उ १–५

(३) सर्वतशूच सूतिकागारस्य सर्षपातसीतण्डुलकणकलिकाः प्रकिरियुः । च. शा. ८–४७
आदारिविदारीबदरीखबिर निम्बपिलुपरुषक शाखाभिरेनं बीजेयत् ।

अ. सं. ३.१–१६–११

(४) षष्ठीनिशां विशेषेण कृतरक्षाबलिक्रियाः ।
श्रागुर्युबान्धवास्तस्य दधतः परमां मुदम् ।। अ. सं. उ १–२६

(५) ततः स्नापयेत् । ततः क्षीरीवृक्षकषायेण सर्वगन्धोदकेन वा तातपनीयरश्रत
निर्वापणक्वोष्णेन कपित्थपत्रकषायेण वा तद्विधेन स्नापयेत । अ. सं. उ १–६
यथादोषं यथाकालं यथाविभव ञूय । सु. शा १०–१२

(६) अथोऽनन्तरं श्रातकर्म कुमारस्य कार्यम् ।
तद्यथा – मधुसर्पिषी मन्त्रेपमन्त्रिते यथाम्नायं प्रथमं प्राशितुं दद्यात् ।

च. शा. ८–४६

ततश्चचैन्दीब्राहमी शडखपुष्पी वचकलकं मधुधृतोपेतं हरेणुमात्रं कुशाग्राभिमन्त्रित
सौवर्णेनाश्वत्थपत्रेण मेघायुर्बलश्रननं प्राशयेत् ।तदव्र ब्राहमी बलाअनन्ता
शतावर्यन्यतमचूर्ण वा । अ. सं. उ. १–८

(७) तद्यथा – मधुसर्पिषी मन्त्रेपमन्त्रिते यथाम्यानं प्रथमं प्राशितुं दद्यातं स्तनमत उर्ध्वमेतेनैव
विधिना दक्षिणंक पातृ पुरस्यात् प्रयच्छेत् । च. शा ८–४६
तस्मात् पथमेऽहिने मधुसर्पिरनन्तामिश्रं मन्त्रयुतं त्रिकालं पाययेद ततः प्राड
निवारितस्तन्यं मधुसर्पिः स्वयाणितल सम्मितं द्विकालं पाययेत । सु शा १०–१४
तदनन्तरं चतुर्थदिवसस्य तृतीयकालमारभ्य
पञ्चमादि दिवसेषु यथेष्टं स्तन्यपानं कारयेत् । सु. शा. १०–१४ पर डलहण

(८) ततः प्रशस्तायाः तिथौ शिस्नातमहवासमुदमुखं शिशुमुपेश्य धात्री प्राऽमुखोपमुपवेश्य
दक्षिणं स्तनं धौतमीशषत्परिस्त्रृत मभिमन्त्रस्य मन्त्रेणानेन पाययेत् ।। सु शा १०–१२

(९) अथैनं श्रातदशनं कमशोऽपनयेत् स्तनात् ।
पूर्वोकं योजयेत क्षीरमन्नं च लघुबृहणम् ।। अ. सं. उ. १–५३

NEONATAL CARE IN HOMEOPATHY

Dr. Suresh Patel

INTRODUCTION :

Homeopathic system of medicine is a perfect and curative system of medicine discovered by German physician Dr. Samuel Christian Fredic Hahnemann in 1790. He declared his discovery to the world in 1796.

The Homeopathic medicines are prescribed on the basis of similars, given in single dose at time in minimum quantity.

Now a days people are so much accustomed to big and substantial doses of allopathic medicines that they find it difficult to believe that very small doses of homeopathic medicine can bring about cure.

It is the misconception about homeopathic medicines that they are slow in action. It is not true. Here I would like to say that the homeopathic medicines act faster than any other systems of medicine if selected properly. Like all other systems of medicine, Homeopathy also has some limitations. In cases where irreversible pathological changes have taken place viz. cirrhosis, cancer, congenital anomalies etc. homeopathy has no cure. We have some medicines to paliate the symptoms and thereby give relief to patients.

Homeopathis system of medicine has a number of prepartions to take care of new born. I shall discuss the common problems/ailments met with in neonatal care in brief and will give an idea about the drugs which are used.

Ailments during neonatal period.

First and the commonest complaint is crying of infant.

Crying of infant may be due to : -

i. Hunger.
ii. Soreness of body due to lying on one side for a ling time and need changing.
iii. It may be due to want of attention for a long time etc.
iv. It may be due to wetting the bed-need cleansing the parts and changing the wet clothes.

Occasional crying of infants should not be a cause for alarm. But if the crying is abnormal or excessive and the usual means of pacifying them fail, we must investigate the cause.

A. The causes may be due to external irritation eg. A pin sticking into the flesh, the pillow and bed too hard, the covering clothes too hot etc. or any injury, insect bites or flies sitting on the face etc.

B. Internal causes are colic, earache, excessive flatulance, dislocationof shoulder or sprain etc.

HOMEOPATHIC TREATMENT

Attend to the infant carefully, treat any cause of injury.

Drugs for injury and sprain : - Arnica, Aconite, Cal. Phos. Rhus. tox Ruta, Bryonia.

Remove any external irritations, wet clothes and look for internal derangements.

Remedies for earache : - Aconite, Belladona, Chamomilla, Pusetilla,

Remedies for colic : Belladona, Colocynth, Mag. Phos, Nux Vomica, Chamomila, Pulsetilla.

Indications of crying remedies when no definite cause is ascertainable.

Belladona : - The infant starts suddenly out of sleep and begins to cry violently.

Jalapa : - The infant is good all the day, but screams, restless and troublesome at night.

Mag. Phos : - Crying of spasmodic character, due to colic or earache. Pain relieved by warmth and pressure.

Lycopodium : - Infant cries all the day, sleeps all the night (Reverse of Jalapa and Psorinum).

Psorinum : Sick babies will not sleep during day, play all throughout the day, but restless, troublesome, screaming all night. Baby has a filthy smell. All excretions have very bad smell.

Birth Asphyxia : - Anti, tart. Carbo veg. Aconite, Cup. met.

Neonatorum Jaundice : Chief remedies are : Acesculus hip Bryonic, Chelidonium, Myrica Cerifera, China, Arsenicum : A'b Carbo veg. Lycopodium

Nat sulph is the best tissue remedy in jaundice if given every four hrs.

Umbilical affections : Abrotanum : oozing of moisture, bleeding from navel of a new born.

Plumbum : Useful in retractionof navel.

(Cal. Phos & Podophyllum)
Hyoscymus : oozing of urine from navel

Ars. alb - Ulcer above navel

Phosphorus : Umbilical haemorrhage based on Hemophilia.

Arnica - Q may be applied extermally in case of rupture and bleeding.

Calendula - Q may be applied externally

Urinary complaints : Retention of urine in new born baby without any congenital defect.

Aconite is the remedy given in 6 potency at short interval. Hot and cold application may be applied over bladder.

Other common remedies are : - canabi sativa Canthris, Lyco., Merc. sol. Sarsaparilla.

Tetanus : Remedies to be used :

Strychninum, Hydrocynic acid, Cicuta virosa, Hypericum and ledum pal. are the chief remedies. Laurocerasus, Physostigma, Nux vom. mag, phos. Cup met.

Convulsion : Cicuta virosa., cup. met Nux. vom., Anethusa cyn. Arnica, cal. phos., nat. sul.

Fever : - Aconite, belladona, Arnica, Ar. alb., Apis, Gesemium. China, Nuz vom., Bryonia, Rhus tox. Pyroginum.

Ferrum phos is a very common remedy used in any kind of fever.

Brain affections : Arnica, Rhus, tox,. Nat sul., Gelsemium m Nux moscata. Opium, Apis. Belladona, Stramonium. Natsulph.

Ophthalmia neonatorum : -Apis; Simple or suppurative or following eruptive disease, Great oedema (baggy-eye lids esp., lower eye). Often found valuable in purulent ophthalmia.

Arg. nit. used in ophthalmia neonatorum : Purulent & gonorrhoeal type worst by warmth Better by cool and oper air (Pulsetilla, Apis, Sulphur).

Arnica : is excellent when ophthalmia is due to mechanical injury, snow-ball strikes, blow or thrusts on the globes of the eye.

a. Pulsetilla it Discharge is purulant and Gonorrhoeal. Profuse thick yellow bloody discharge. Worst in the evening

b. Nitric acid. Ophthalmia neonatarum. Gonorrhoeal, syphillitic, or scrofulous types. worst in morning.

c. Kali carb. Ophthalmia with bag like swelling of the upper eye lids.

d. Merc. sol. : - Ophthalmia with lids spasmodically closed, red, inflamed. swollen. agglutination worst at night, heat and cold.

e. Other remedies are : Kali. bic. m Merc. cor., Graphitis, Conium. Lach esis

Conjunctivities: Aconite, Euphresia, Alium cepa., Nux, vom. Sepia, Belladona, Sulphur, Merc. sol, Arj. nit., Arnica. Aurumment, Zin. met., Silicea.

Earache : Otitis, Otalgia, and Otorrhoea

Drugs are: Aconite, Mag. phos., mer. sol., Pulsetila Rhus tox., Psorinum, Hep. sul, Kali. bic Silicea. Kali. mur. Salphur.

Coryza : Drugs : - Allium cep. Euphrasia, Ars. alb. Sinapis Nigra. natl. mur. Merc. Sol. Pulsetilla. Kali iod. Kali sul. Nux vom. Arum tri.

Snuffles : Amo carb. Hep sul, Nux, vom. Sticta. p. Samucus. etc.

Note : External application of ghee or olive oil in nostrils is helpful.

Cough and whooping : Accompanying respiratory affections.

Aconite. Belladona, Bryonia, Allium. cepa. Ferr. Met. Pulsetilla, Spongia, Ant. tart. Anticrud. Causticum. Hep. sul. Ipecac. cup met. Droera. cina. Mephitis. Coralium Belladona.

Mouth troubles :- Aphthous mouth and stomatitis.

Stomach and intestinal troubles. :-

A) Vomiting and regurgitation

a) Aethusa cyn. Vomiting of milk in curds. baby can't tolerate milk in any form. Violent vomiting. hungry after every vomiting. and when awakes wants to feed.

b) Anti crud. :- Vom it's curds after nursing. Refuses to be nursed afterwards. Thich whilte milky coating of the tongue.

c) Saniculla. :- Vom it of curds after nursing & sleep after vomiting.

d) Anti tart. :- After vomiting baby becomes drowsy and sweaty. More sweat on forehead.

e) Ipecac. Nausea is more persistant with clean tongue

f) Vert alb. : violent vomiting with colic, cold sweat. Great weakness is felt.

g) Ars. alb. : Great prostration. vomiting immediately after eating and drinking restlessness is typical

h) Cal. carb. : - Vomiting of milk in curd, sour smell from all discharges., More sweat present on back of the head during sleep.

B) Colic :- Remedies in General :

Colocynth, Mag, phos, Dioscoria, Nux. Vom. Chamomilla. China, carboveg. Lycopodium.

C) Constipation :- Am. mur, alumina, Cal Carb. Mag, mur, Plumbum, Nux. vomica Anacardum, Bryonica, Sulphar, Lyco Carboveg,

D) Diarrhoea, Cholera Infuntum :

Ars, alsb, China, Cup,. met, Vert, Vir, Vert alb. Secale Cor. & Coamphora.

Podophysum, Ferr. met. Prg. Nit Chumomila, Dioscoria.

Wakefulness :-

Or inability to sleep is often found in infants. It may be due to overloading of stomach, injurious food, flatulance or by the mothers drinking excessive tea, coffee wine etc.,

Treatment : Prevent and remove the above causes.

a) Coffee cruda : Sleeplessness, when due to excitment noise on light, Infant would like to talk & nnot to sleep.

b) Opium : When Coffee, cruda is not sufficient and there is redness on the face Sleepy but can's sleep. Constipation is present.

c) Belladona : When the infant appears to be drowsy but cant sleep, or falls asleep for a few moments and next moment cries.

d) Pulsetilla :- When sleeplessness is due to indigestion or overloading of stomach.

e) Nux. vom. : When xwakefulness and restlessness is due to mother taking excessinve tea, coffee, alocholic drinks.

f) Kali .Phos : A great nervous tonic.

Restlessness : It is a general symptome often found in infant.

Common drugs : Aconite, Ars, alb, Antart,. Chamomilla, Cina, Kali. phos Jalap, Psorinum, Lycopodium, Rhus tox.

Homeopathic medicines are prescribed on the basis of symptomology, both objective and subjective. But in some cases of congenital defects like umbilical hernia,. we have some good medicines in our homeoparthy e.g. Lycopodium, Nux. vom, etc. Similarly. There are very good medicines available in our pathy which are helpful in cases before, during and after operations. Acetic acid is a very good drug for bad effect of anaethesia. Calendulla can be used for external application or dressing.

FORWARDING SHEET

1. GROUP : URBAN MIDDLE CLASS AND ELITE GROUP/
   URBAN SLUMS/RURAL/TRIBAL.

2. DEFINED AREA :_____

3. APPROXIMATE POPULATION OF DEFINED AREA GROUP_____

4. NAME OF PLACE :_____
   DISTRICT :_____
   STATE :_____

5. PERIOD OF DATA COLLECTION :_____TO_____

6. NAME OF INVESTIGATOR :_____
   DESIGNATION :_____

7. NAME OF INTERVIEWER :_____
   DESIGNATION :_____

PROFORMA FOR HOME DELIVERED MOTHER

Serial No. :_____ Date of Interview :_____
Respondent Name :_____

(A) Respondent's Age :_____Occupation :_____
    Education (Degree standard passed)_____
(B) Husband's Age _____Occupation _____
    Education _____
(C) Family type : Nuclear/Extended or Combined.

(D) No. of Inmates :_____
    Total monthly income from all sources - Rs. _____
(E) Years of active married life _____Pregnancy lst/2nd 3rd/4th/5th.
(F) Outcome of this pregnancy alive/dead/died within one week/died after one week.

ANTENATAL AND NATAL EVENTS :

1. Did you seek Antenatal care : Yes/No
   If Yes, motivated by workers/ANC/advised by elders/on on your own.
   If no,give reason : Ignorant/ANC not available/available but difficult to reach /any other reason_____
   _____

2. Who offered ANC:TrainedDai/Untrained Dic/ParamedicalDoctor/Any other (specify)
_____
How many times did you go for ANC ? _____

3. Do you know the date of your last menstrual period : Yes/No

4. Did you make changes in your diet during pregnancy : Yes/No
If yes : Extra food /any special foods (specify)_____
Decrease : Food intake.

5. Did you restrict any particular foodstuffs during pregnancy Yes/No,If yes :
Name of food restricted Reason for restriction

6. Did you take folic acid+Iron tab. during pregnancy : Yes/No
If yes : From whom : Market/Health worker/Hospital; and when :
First 3 months/4-5 Months/6-9 Months.
If No : Why ignorant /Not available /Causes discomfort /
Not advocated by Tradition /Any other_____

Problem Measures

8. What traditional measures did you adopt to protect your pregnancy ?

None
Keeping outdoors after pillow
Not going out in an eclipse
Avoiding sexual intercourse
Putting on a ganda or tabij
Observing religion - rites :
Fasting / Praying /Any other _____
Any other (specify)_____

In reference to above, do you think these are : Essential/
Important but not essential/worthless/should be continued/
discontinued in future/Not essential but to be continued.

9. What measures are you advised and you practice for easy labour ?
Food restriction/water restriction/castor oil/

Medicines (Put name of medicine _____)/dietary change
(ifany,what_____).
any particular exercise_____.

10. Do you know any particular sign/symptom for predicting the sex of your expected child ?
Yes/No
If Yes : Specify _____.

11. Do you know of any specific ritual of practice advocated:
For having a Male baby : Yes/No if yes,what _____.
For fair colour of the baby : Yes/No If yes,what _____.
For good hair of the baby : Yes/No,if yes,what?_____.
For good weight of the baby : Yes/No,If yes,what?_____.
Any other _____

12. Was any specific preparation done for your delivery in advance like fixing the place for delivery : Yes/No

13. Did you get any advice antenatal for successful breast feeding later ? Yes/No,If yes,what?
_____.
who gave this advice / _____.

14. Why was the delivery conducted at home ?
custom/transport problem/Medical Services not available/No family member available at home to take care of family;
gone for hospital delivery/
Any other_____.

15. Who conducted the delivery ? Elderly lady/Untrained Dai/
Trained dai/Paramedical workers/Doctor/Any other (specify)
_____.

16. If necessary,will you allow a male doctor to conduct your delivery : Yes/No

17. If your child was delivered at home,what practices/preparations were done for or during labour ?
Prior cleaning of room in which delivery was to beconducted : Yes/No
Hand washing by person conducting delivery : Yes/No
Cleaning of perineum before delivery : Yes/No
Enema to Mother : Yes/No
Medicines/Injections given to Mother : Yes/No;
If yes,specify _____.
Per-vaginal (p/v) examinations done just beforedelivery : Yes/NO
If yes- Did the examiner wash hands thoroughly ?yes/No, use gloves, Yes/No
Any other practice/preparation _____

POST NATAL EVENTS :

18. How was the cord cut : New blade/scissors/old blade/Knife_____
was the instrument boiled : Yes/No
How was the cord tied : With thread/rubber/elastic_____not tied, then _____
Was the cord cut after the delivery of placenta or before the delivery of placenta ?
why _____

19. What was applied on the cord after cutting ?
gentian violet/ash/ghee/kum kum/cow dung/Any other_____

20. How was the shed cord disposed of ? Discarded/thrown/ buried/_____
If anything was done to hasten shedding ?_____

21. What is done if the child does not cry immediately after birth ?
Slapping/Flicking/ Immersing in water-hot/ cold/Mouth to mouth breathing/
Any other (specify)_____

22. Do you give bath to the Baby immediately (within 6 hours) of Birth : Yes/No,
If no, then is the lst bath given ?_____
which oil is used ?_____
which soap is used ?_____
Any other material used _____
What type of bath given to Mother :_____
Were you kept isolated with your Baby after delivery ?
Why ?_____
for how many days ?_____

23. What is done to keep the baby warm?No special efforts?
doors and windows of room closed / tight wrapping of hands andfeet(Straddling)/
others_____

24. When did you give lst feed to the Baby ?_____ hours after birth
Whatwas given_____
_____
Why thrown/discarded ?_____

25. When did you first put the baby on breast ? _____hours after birth
Did you supplement it with top milk ? If yes,why_____
_____
If breastfeed not given, why _____
_____

26. If you are ill, do you continue to nurse your Baby ?
Yes/No,also mention nature of illness_____
What effect has your illness on your breast milk output ? _____

27. Do you apply Kajal to your baby ? Yes/No, If yes,Home made/purchased from market
Why ? advised by elders/leads to beautiful eyes/
traditional custom/any other _____ ___

28. Do you give massage to your Baby ? Yes/No
If yes,Why ? Custom/advice by elders/any other_____

29 Do you use a pacifier for your baby ? Yes/No
If yes, Why ?

30. How frequently do you bathe your baby ? Daily/Any other
_____
Who bathes the baby : Self/attendant/relative/Others_____
Adjuncts used for bath : Soap/Gram powder (Besun)/ Moong powder/Butter/Cream/
_____

31. What practices do you follow for preventing ill efforts of the evil eye (Nazar) on your baby ?
Tabij/Kandora/Wrist hand with black & white beads/Black-teeka/any other
_____

32. What measures/Medicines are used for following 'Baby' problems :

	Medicines/ Who advised	Measures
Jaundice	_____	_____
Vomiting	_____	_____
Cough	_____	_____
Fever	_____	_____
Constipation	_____	_____
Abdominal Distension	_____	_____
Pyoderma	_____	_____
Excessive crying	_____	_____
Regurgitation of feeds	_____	_____

33. Are you particular about specific about :
a) Clothes : Old/New Material _____/Hooks/Buttons/
Any others_____
b) Toys :
c) Cradle :

34. Do you know the birth weight of your Baby ? Yes/No
If yes, who weighed the baby at birth ?_____
Do you periodically get your baby weighed ?
Where _____
Who weighs _____
How frequently _____

35. Have given 'Janam Ghutti' to your baby ? Yes/No
Who advised, Elder/Advertisement/Any other_____
What are its ingredients ?
When did you start giving ?
How did you prepare ?
(Home made/Ready made)
How much did you give at a time ?
How did you give it ?

36. Has your baby been immunized ?
Yes/No, If yes,who immunized_____
Which vaccines were given_____

37. Do you give 'Gripe water' to your baby ? Yes/No
If yes, who advised Elder/Advertisement?_____

38. Enumerate all the 'Bad' rearing practice (according to you) known to you :
_____
_____
_____

39. Enumerate all the 'Good' rearing practices (according to you) known to you :
_____
_____
_____

40. Do you know anout birth registration ? Yes/No
If yes, did you get this child's birth registered?
Yes/No
If no,why not ? _____
_____

PROFORMA FOR HOSPITAL DELIVERED MOTHER

29. Has your baby been immunized ?
Yes/No,If Yes who immunized _____
_____
Which vaccines were given _____

30. Do you give 'Gripe water' to your Baby ? Yes/No
If Yes, who advised : Elder/Advertisement/_____
_____

31. Enumerete all the 'Baby' rearing practice (according to you) known to you :
_____
_____
_____
_____

33. Enumerate all the 'Good'rearing practices (according to you) known to you :
_____
_____
_____
_____

34. Do you know about birth registration ? Yes/No
If Yes,did you get this child's birth registered ? Yes/No
If no, why not ? _____
_____

PROFORMA FOR HOSPITAL DELIVERED MOTHER

Serial No. :_____ Date of Interview :

(A) Respondent's Age : _____ Occupation :_____
Education (Degree standard passed) _____

(B) Husband's Age _____ Occupation _____
Education _____

(C) Family type : Nuclear / Extended or combined

(D) No. of Inmates : _____
Total monthly income from all sources - Rs. _____

(E) Years of active married life _____ pregnancy 1st / 2nd / 3rd / 4th / 5th

(F) Outcome of this pregnancy alive / dead born dead / born / died within one week / died after one week.

ANTENATAL AND NATAL EVENTS :

1. Did you seek antenatal care : Yes / No
If yes, motivated by workers / ANC/ Advised by elders / on your own.
If no, give reason : Ignorant /ANC not available / available but difficult to reach / any other reason : _____

2. Who offered ANC : Trained Dai/Untrained Dai/ Paramedical/Doctor / Any other (specify) _____
How many times did you go for ANC ? _____

3. Do you know the date of your last menstrual period : Yes/No

4. Did you know changes in your diet during pregnancy : Yes/No
If Yes : Extra food/Any special foods (specify) :_____
Decrease : Food intake.

5. Did you restrict any particular foodstuffs during pregnancy Yes/No. If yes :

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

6. Did you take folic acid+Iron during pregnancy : Yes/No
If Yes : From who : Market/Health worker/Hospital and when First 3 Months/4-5 Months/

6-9/Months.
If No : Why ignorant/Not available/Causes discomfort/Not advocated by Tradition/
Any other_____

Problem	Measures
_____	_____
_____	_____
_____	_____

8. What traditional measures did you adopt to protect your pregnancy ?

None
Keeping knife under pillow
Not going outdoors after dose
Not going out in an eclipse
Avoiding sexual intercourse
Putting on a ganda or tabij
Observing religion rites :
Fasting/Praying/Any other _____
Any other (specify) _____

In reference to above, do you think these are : Essential/Important But not essential/
Worthless/should be continued/discontinued in future/Not essential but to be continued.

9. What measures are you advised and you practice for easy labour ? Food restriction /
Water restriction/Castor oil/ Medicines (Put name of Medicine _____) /
Dietary change (if any what _____) Any particular

10. Do you know any particular sign/Symptom for predicting the sex of your expected child ?
Yes/No
If Yes : Specify _____

11. Do you know of any specific ritual or practice advocated :
For having a Male Baby : Yes/No, If yes. what _____
For fair colour of the Baby : Yes/No, If Yes, What ?_____
For good hair of the Baby : Yes/No, If Yes,What ?_____
For good weight of the Baby : Yes/No, If Yes, What?_____
Any other _____

12. Was any specific preparation done for your delivery in advance like fixing the place for delivery
: Yes/No

13. Did you get any advice antenatally for successful breast feeding later ? Yes/No,
If Yes, what ?_____
Who gave this advice ?_____

14. How was the shed cord disposed of ? Discarded/thrown/ buried/_____
If anything was done to hasten shedding ?_____

15. Do you give bath to the Baby immediately (within 6 hours) of Birth : Yes / No,
If no, then, when is the lst bath given?_____
Whenever bathed,
which oil is used ? _____
which soap is used ? _____
Any other material used _____
What type of bath given to Mother:_____-

Were you kept isolated with your Baby after delivery ?
Why ? _____
for how many days ? _____

16. What is done to keep the Baby warm ? No special efforts/doors and windows of room closed/ covering loosely with ward clothes / tight wrapping of hands and feet (Straddling)/ others _____

17. When did you give 1st feed to the Baby ?_____ hours after birth.
What was given _____
Colostrum given/thrown ? If thrown, for how much duration was it discarded ?
_____
Why thrown/discarded ? _____

18. When did you first put the Baby on breast ?_____ hours after birth.
Did you supplement it with top milk ? If yes, why _____
If breastfeed not given, why _____
_____

19. If you are ill, do you continue to nurse your Baby ? Yes/No,
also mention nature of illness _____
_____
What effect has your illness on your breast milk output ?
_____
_____

20. Do you apply kajal to your Baby ? Yes/No, If yes, Home made/purchased from market
Why ? Advised by elders/leads to beautiful eyes/traditional custom/
any other _____

21. Do you give massage to your Baby ? Yes/No
If Yes, Why ? Custom/advice by elders/any other _____

22. Do you use a pacifier for your Baby ? Yes/No
If Yes,Why ?

23. How frequently do you bathe your Baby ? Daily/any other____
_____
Who bathes the Baby : Self/attendant/relative/Others_____
Adjuncts used for bath : Soap/Gram powder (Besun)/Moong powder/Butter/Cream/
_____
When do you not bathe the Baby ?_____

24. What practices do you follow for preventing ill efforts of the evil eye (Nazar) of your baby
Tabij/Kandora/Wrist hand with black & white beads/Black- teeka/any other
_____

25. What measures/Medicines are used for following 'Baby' problems :

	Medicines/ Measures	Who advised
Jaundice	_____	_____
Vomiting	_____	_____
Cough	_____	_____
Fever	_____	_____
Constipation	_____	_____
Abdominal distention	_____	_____
Pyoderma	_____	_____
Excessive crying	_____	_____
Regurgitation of feeds	_____	_____

26. Are you particular about specific
a) Clothes : Old/New Material _____/Hooks/Buttons/
Any others _____
b) Toys :
c) Cradle:

27. Do you know the birth weight of your Baby ? Yes/No
If Yes, who weighed the baby at Birth /_____
Do you periodically get your baby weighed ?
Where _____
Who weighs_____
How frequently _____

28. Have given 'Janam Ghutti' to your baby ? Yes/No
Who advised, Elder/Advertisement/Any other_____
What are its ingredients ?
When did you start giving ?

How did you prepare ?
(Home made/Ready made)

29. Has your baby been immunized ?
Yes/No,If Yes who immunized _____
_____
Which vaccines were given _____
_____

30. Do you give 'Gripe water' to your Baby ? Yes/No
If Yes, who advised : Elder/Advertisement/_____
_____

31. Enumerate all the 'Baby' rearing practice (according to you) known to you :
_____
_____
_____
_____

33. Enumerate all the 'Good' rearing practices (according to you) known to you :
_____
_____
_____
_____

34. Do you know about birth registration ? Yes/No
If Yes,did you get this child's birth registered ?
Yes/No
If no, why not ? _____
_____

GLIMPSES OF TRADITIONAL PRACTICES OF NEONATAL CARE IN INDIA

1. In the Chambal region of Central India the dai tramples over the severed placenta to make the newborn initiate its first breath (in case she thinks the baby needs resuscitation). For a prelacteal feed a newborn may be put on water, cow's urine and sugar solution for the first 3 days of life.

2. In rural Gujarat, a pregnant lady with a bad obstetric history begs for clothes and other articles for her future child(bhikaro), ensuring a safe outcome of her pregnancy.

3. In West Bengal a rai pillow (pillow filled with mustard seeds) is traditionally used for the newborn so as to ensure a proper shape of the head.

4. In villages of Agartala it is believed that if a pregnant women eats twin bananas she will beget twins.

5. In slums of Bombay, the shed cord is preserved and processed for various medicinal purposes, chief indications being respiratory distress and neonatal conjunctivitis.

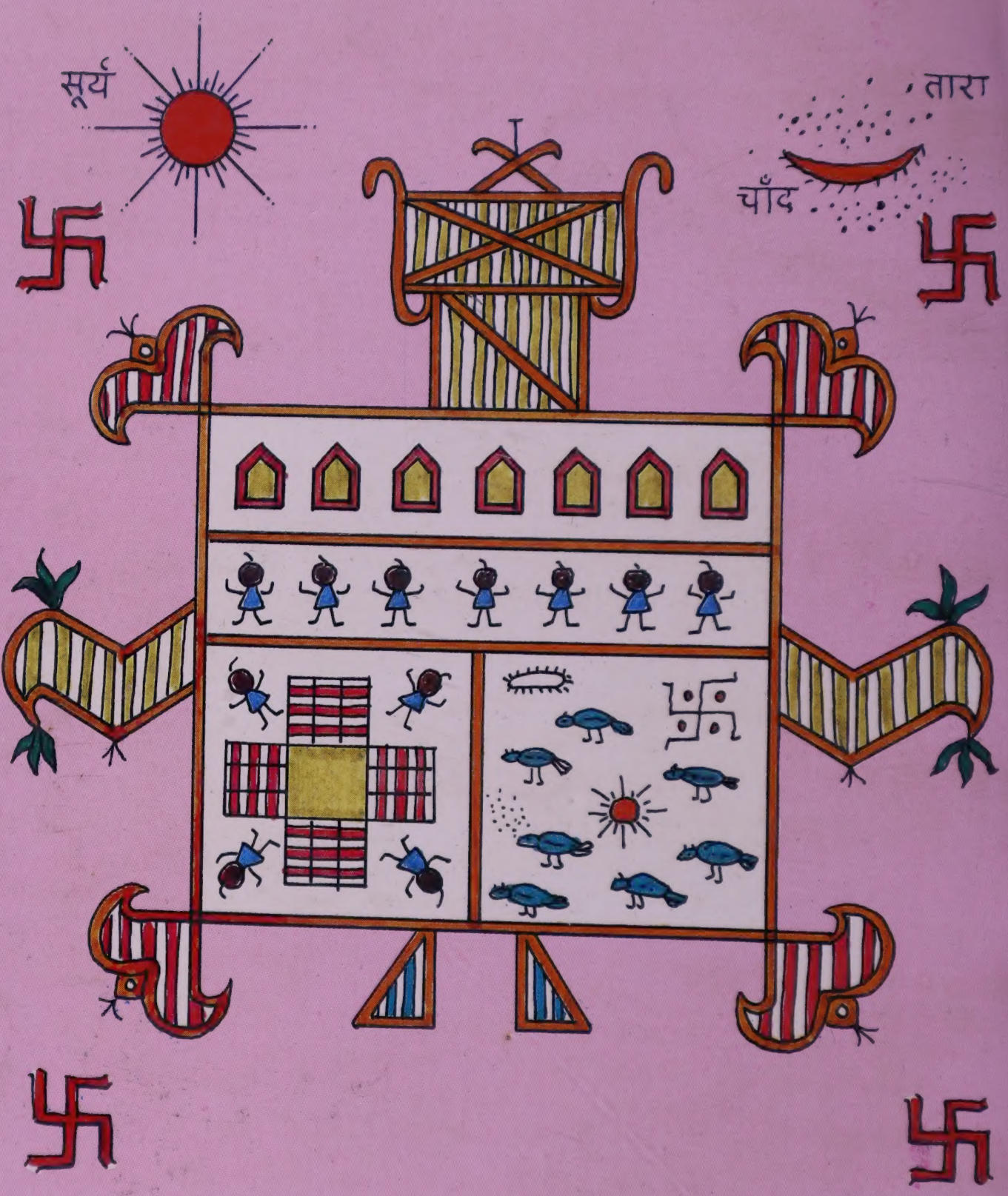
6. In urban Jodhpur, the cord may be put in a firm knot over itself to secure a cord tie.

7. In rural Punjab, if a child is born blue and lifeless, the placenta may be warmed up on an iron dish over burning cowdung cake so that life can travel up to the child and the color may improve.

8. In Tamil Nadu ass milk is given as a prelacteal feed, considering it to be closest to human milk.

9. In urban Gwalior, if a pregnant lady eats the shed cord or hair of a male newborn she is more likely to deliver a son. Or she may brand another healthy male child, in case the latter dies, she becomes sure of having a male child.

10. In rural parts of Maharashtra, one of the reasons for cutting the cord after separation of the placenta is that the cord may otherwise return back to the uterus, travel upwards, reaches the heart of the woman and kills her if it is cut earlier.



Neonatology Unit
Department of Paediatrics,
B. J. Medical College and
Civil Hospital, Ahmedabad-380 016.